NATIONAL POLICE FOUNDATION
*Advancing Policing Through Innovation and Science*

# ANALYSIS OF 2018 USE OF DEADLY FORCE BY THE PHOENIX POLICE DEPARTMENT

April 2019



This report was developed by the National Police Foundation.

National Police Foundation
1201 Connecticut Ave., NW Suite 200
Washington, D.C. 20036

www.policefoundation.org
Twitter: @policefound
info@policefoundation.org

Authors: Jeff Rojek, PhD, Michigan State University; Justin Nix, PhD, University of Nebraska Omaha; Scott Wolfe, PhD; Michigan State University; Geoff Alpert, PhD, University of South Carolina; James Burch, National Police Foundation; Julie Grieco, PhD, National Police Foundation; Teresina Robbins, M.S., National Police Foundation.

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## Acknowledgements

The National Police Foundation would like to acknowledge the 15 Phoenix Police Department (PPD) officers, supervisors, and investigators who participated in focus groups; command and professional staff; the Phoenix Law Enforcement Association (PLEA); the Phoenix Police Sergeants and Lieutenants Association (PPSLA); the Maricopa County Attorney's Office; eight community members, community groups and organizations from the initial 2018 community meeting; five community members, community groups and organizations that participated in follow up calls; and, public defenders for their cooperation and insight during this study. The information provided was valuable and made a significant contribution to this assessment.

## 1. Background

Law enforcement officers are given the unique legal authority to use force to protect society and maintain peace. In fact, police officers have the authority to use deadly force in situations where suspects constitute an imminent threat of serious injury or death to others. Police use of deadly force is perceived by members of the public according to their perspective, knowledge of or beliefs about the event and perception of police legitimacy. In light of this and the significant impact these perceptions have on communities, particularly those with lower trust or beliefs regarding police legitimacy, an essential best practice for law enforcement agencies is to be transparent in communicating information on deadly force events and related investigations. It is similarly critical for agencies to be proactive in conducting and publicly sharing assessments of deadly force events, including independent assessments. This report represents such a proactive effort by the Phoenix Police Department (PPD) and Chief Jeri Williams who, at a meeting of community representatives in late August 2018 stated that she thought it imperative to "get to the truth quickly," wherever that may lead.

After averaging 21 officer-involved shootings (OIS) a year from 2009 to 2017, the City of Phoenix experienced a significant and alarming increase to 44 OIS events in 2018. Mid-way through 2018, the City of Phoenix contracted with the National Police Foundation to conduct a "rapid" (six-month) analysis of deadly force incidents in 2018 and to provide results as quickly as possible. This is not the first time the department has commissioned reviews of OIS events or increases. After averaging 18 OIS events from 2009 to 2012, the department had 31 OIS events in 2013. In response, then Chief Yahner tasked the PPD Professional Standard Bureau (PSB) to conduct an analysis of OIS events. The department partnered with the Center for Violence Prevention and Community Safety at Arizona State University to assist with the analysis. The resulting report, Phoenix Police Department: A Review of Officer-Involved Shootings 2009-2014[1] (referred to going forward as the "ASU Report"), examined OIS events from 2009 to 2014. The ASU Report provides a thorough review of PPD's process for investigating OIS events at that time, including details on the criminal and administrative investigative process, and the efforts to inform training. It also provides analysis on the characteristics of OIS events at the time, to include such elements as the situation or frames preceding the OIS, officer and subject characteristics, officer and subject injuries, and department investigative outcome. In addition, the ASU Report compares policy and practice in the Phoenix Police Department related to OIS events to recommendations of the U.S. Department of Justice Collaborative Reform Model that was implemented in the Las Vegas Metropolitan Police Department shortly before the ASU Report was completed. Based on these assessments, the ASU Report made 15 policy and practice recommendations.

This National Police Foundation (NPF) current study (referred to going forward as the "Study"), in part, builds on the ASU report by examining characteristics of OIS events from 2009 to 2018. However, the current analysis pays particular attention to identifying unique patterns in the 2018 events relative to characteristics of OIS events from 2009 to 2017, which were covered by the ASU report. The current study also attempts to provide more context around the 2018 PPD OIS events. An initial meeting on August 2018 was held with approximately eight representatives of community organizations and community members, and interviews and/or focus groups were held with approximately 15 officers and investigators, and 12 PPD supervisors. Follow-up phone interviews were conducted with four community group representatives as well as a public defender who community members recommended we make contact with and interview for the study. PPD OIS events are examined relative to other large agencies in the United States, other departments in Arizona, and other departments in Maricopa County. Finally, data that can provide insight on broader trends that may influence patterns in OIS events are examined, including non-lethal force events, force-related investigations conducted by the Professional Standards Bureau, patterns of violent crime trends, arrest patterns, and patterns in assaults on officers. The analyses of these data are intended to examine two broad questions for this report:

- Are there patterns in the characteristics of the 2018 OIS events that differ from OIS events in prior years?
- Did broader trends in the behavior of officers or the environments in which they work contribute to the increase in OIS events in 2018?

[1] See https://www.phoenix.gov/policesite/Documents/shooting_review.pdf

The primary sources of data for examining these questions are from databases maintained by the PPD, which include:

- Officer-involved shooting data 2009-2018
- Use of force data 2009-2018
- Reported crimes 2009-2018
- Adult arrests 2009-2018
- PSB use of force investigations 2014-2018 (June)
- Assaults on officers 2009-2018.

It is important to note that the department maintains the above data for administrative purposes and not research interests. As a result, in some cases, the types of data collected, the maintenance of the data, and how the data are coded for administrative purposes create limitations for the present analysis. In addition, the PPD changed its records management system (RMS) in October 2015, which created differences in the collection and coding of department data before and after this date, resulting in a lack of data collection and coding consistency. To avoid potential inaccuracies as a result of these collection and coding consistency issues, some of the analyses conducted in this report examined only the years 2016 to 2018.

Department databases were supplemented by additional external sources of data, including:

- Population and crime data from the Federal Bureau of Investigation's Uniform Crime Report 2015-2017
- Officer-Involved Shooting investigations in Maricopa County conducted by the Maricopa County Attorney's Office 2017 and 2018
- *Washington Post* "Fatal Force" database 2015-2018

The NPF team also explored or inquired about community organization data (i.e., maps of OIS events and community survey data). The six-month study period, designed to produce results as quickly as possible to inform police practice and potentially reduce the frequency of OIS events, made collection of additional data outside of PPD and not readily available challenging.

The Study is divided into six sections. The first examines ten years of PPD OIS events from 2009 to 2018, with additional comparisons to other large agencies in the United States, Arizona, and Maricopa County. The second section examines community member and officers' perspectives on the trend in OIS events and 2018 increase. The third section provides an analysis of characteristics of OIS events from 2009 to 2018, including officer and subject characteristics. The fourth section examines trends in officer behavior and the policing environment in PPD to identify potential broader patterns that may be related to the increase in OIS events in 2018. The fifth section provides an overview of related department policy and training. The sixth section provides an overview of the study findings and recommendations drawn from this assessment.

# 2. 2018 in Context

## 2.1 The Phoenix Police Department

Chief Jeri L. Williams, Executive Assistant Chief Michael Kurtenbach and six Assistant Chiefs lead the Phoenix Police Department (PPD). The agency is comprised of six divisions – Community & Support Services, Investigations, Patrol Operations South, Patrol Operations North, Strategic Services, and Reserve Divisions. There are over 20 bureaus within the six divisions, and the department's eight precincts cover almost 518 square miles.

In 2008, PPD entered a hiring freeze and implemented other budget reduction strategies which effectively stopped recruitment and many of the previously available training opportunities. During one of our focus groups, PPD officers explained that in 2015, they reopened recruitment with a goal to bring on more women and people of color to better represent the community they serve. Despite the increase in recruitment, and newly instituted and improved in-service training since 2015, PPD, not unlike other agencies in the U.S., still struggles with retention of officers. The number of officers employed by PPD as of November 2018 (2,890) remains similar to where they were in 2015 (2,692).[2]

## 2.2 General City Information

The City of Phoenix has an estimated population of approximately 1.626 million, with a population density of 3,139 people per square mile. This makes it the most populous city in the state of Arizona and the fifth most populous city in the nation. Phoenix ranked second on the U.S. Census Bureau list of cities with the largest population increase in 2017.[3]

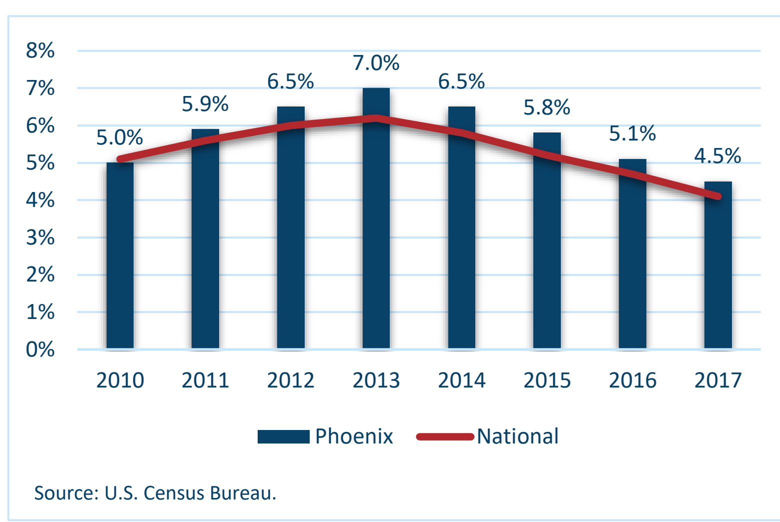



***Figure 1: Phoenix, AZ Unemployment v. National Unemployment***

Examining 2010 – 2017 data from the U.S. Census Bureau, unemployment rates in the City of Phoenix have fluctuated over the years but have been generally comparable to national rates. In 2010, there were 54,254 people unemployed (5.0%) compared to the national average (5.1%).[4] Unemployment in Phoenix peaked in 2013 at 77,364 (7.0%, compared to 6.2% nationally) only to fall again.[5] Visual representation is shown in Figure 1.

As of 2016, 15 to 34-year-olds make up 30.1% of the population, consistent with prior years. The distribution of race among the city has also been quite steady – Whites make up around 72% percent of the population (this includes Hispanic/Latino). Black or African Americans make up nearly seven percent and the Asian population is close to four percent.[6]

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[2] Data received from Phoenix Police Department, February 22, 2019.
[3] "Census bureau reveals fastest-growing large cities," by United States Census Bureau, 2018 https://www.census.gov/newsroom/press-releases/2018/estimates-cities.html (accessed March, 11, 2019).
[4] United States Department of Labor, Bureau of Labor Statistics, 2018. https://www.bls.gov/regions/west/az_phoenix_msa.htm (accessed March 11, 2019).
[5] "Quick facts: Arizona", United States Census Bureau, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk (accessed March, 11, 2019).
[6] "Quick facts: Phoenix city, Arizona," United States Census Bureau, 2018, https://www.census.gov/quickfacts/Phoenixcityarizona (accessed March 11, 2019).

## 2.3 Poverty

Arizona has seen a slight increase in the number of people below the poverty line since 2010, but overall it has remained relatively stable. In 2017, an estimated 17.0 percent of people in Arizona were below the federal poverty line.[7] The City of Phoenix has followed a similar trend. This is represented by Figure 2.

Despite some increase in recent years, the percentage of those below the poverty line has remained relatively stable in Phoenix from 2010-2017, averaging 21.7% with an overall range of 4.1 percentage points. Average yearly increases between 2010-2013 were 0.84% and decreased yearly by 0.77% per year after that.[8]

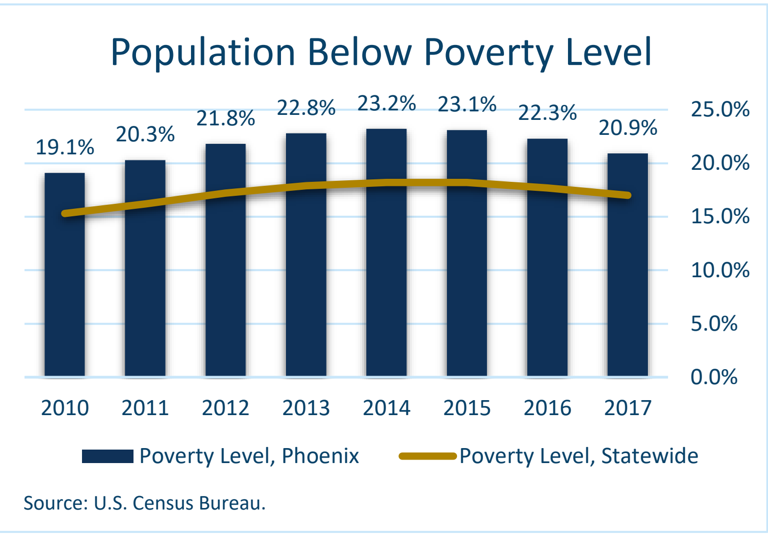



***Figure 2: Population Below Poverty Level in Phoenix, and the State of Arizona***

## 2.4 Crime

The crime rate in Phoenix has varied throughout the years. In 2010, there were 8,002 violent crimes known to law enforcement, according to the City of Phoenix Uniform Crime Report (UCR) data. In 2012, the number of violent crimes increased to 9,458. By 2018, it increased to 12,111 which is only slightly lower than its 2017 peak of 12,511 – the highest it had been in recent years.[9] [10]

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[7] "Quick facts: Arizona", United States Census Bureau, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk (accessed March, 11, 2019).

[8] "Quick facts: Phoenix city, Arizona," United States Census Bureau, 2018, https://www.census.gov/quickfacts/Phoenixcityarizona (accessed March 11, 2019).

[9] "City of Phoenix open data," City of Phoenix, 2019, https://www.phoenix.gov/policesite/Documents/UCR_2010-2018.pdf (accessed March 11, 2019), adjusts for excluding negligent manslaughter to be consistent with FBI Uniform Crime Report recording practices and data.

[10] "2017 crime in the United States, Arizona full-time law enforcement employees," Federal Bureau of Investigations, 2018, https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/tables/table- 78/table-78-state-cuts/arizona.xls (accessed March 11, 2019).

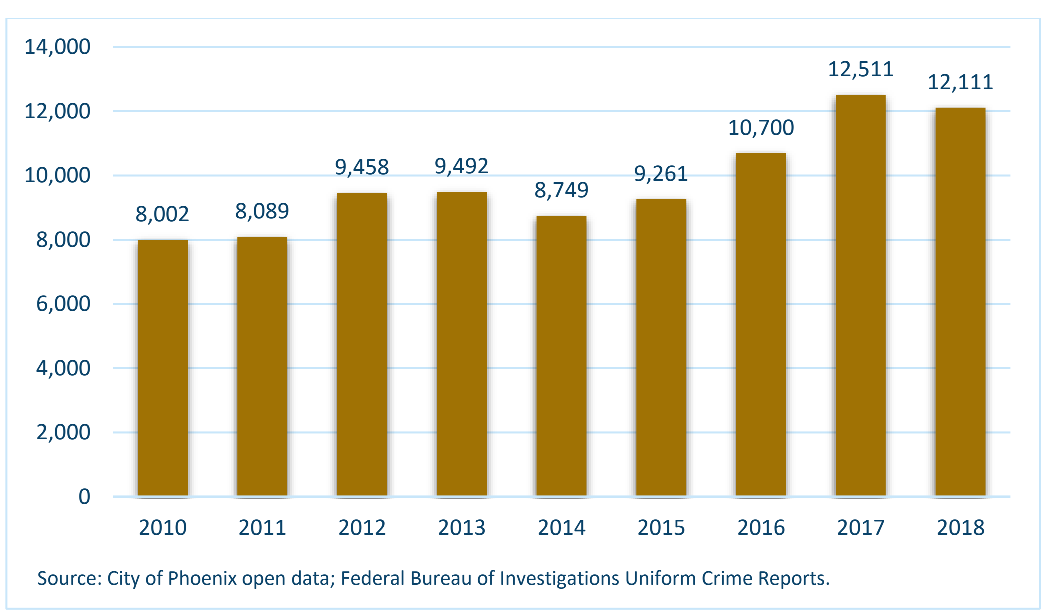



***Figure 3: Violent Crime Incidents in Phoenix***

A precipitous increase in aggravated assaults occurred in 2016 (6,263) and 2017 (7,919). The closest year with such a high number of aggravated assaults in recent years was 2006 with 6,047. In 2018 there was a slight decrease in aggravated assaults to 7,780. At a national level, roughly 44% of all aggravated assaults are committed by 17 to 34-year-olds. This statistic has been stable over the past decade. This age group also commits roughly 40-42% of violent crimes in the nation. From 2007 to 2009 in Arizona, the number of active gang members known to police increased from 20,873 to 32,772. From 2014 to 2016, the state saw an increase in violent crime. Roughly 26,900 violent crimes were committed in 2014, compared to the nearly 32,600 in 2016.[11]

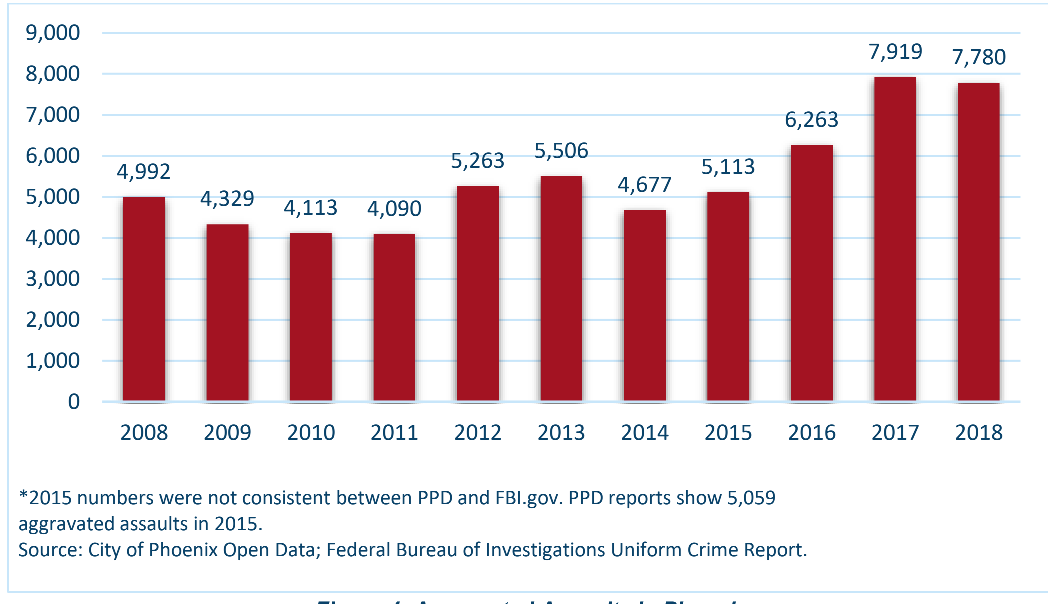



***Figure 4: Aggravated Assaults in Phoenix***

[11] Beginning in January 2016, Phoenix's UCR aggravated assault counts include incidents that meet the updated FBI aggravated assault definition in regard to the use of BB/pellet guns. This definition change may account for some of the increase seen in 2016 aggravated assaults in Phoenix, which may also impact state counts of violent crime.

## 2.5 Mental Health

With both the community and police officers raising concerns and questions about the role that mental health may play in encounters that turn deadly, we attempted to examine whether mental health needs were increasing and/or if crisis and treatment services were declining in Phoenix. We were unable to find sufficiently recent data from government sources to inform our review. In 2018 however, the national non-profit organization, Mental Health America, ranked Arizona 39th among all U.S. states for its overall ability to address mental health issues. It scored slightly higher in the adult rankings (30 of 51), and a bit lower for youth (43 of 51). According to the same organization, Arizona ranks near the middle regarding prevalence of mental illness (25 of 51), but access to care is relatively low, at 42. This is an improvement from their 2015 ranking (50 of 51 – with only Oregon scoring lower), but it signifies a disconnect between community members suffering from mental health issues and access to care.[12]

A 2016 report by the Phoenix Mayor's Commission on Disability Issues (MCDI) conducted its own assessment with 405 PPD patrol officers, and 244 community members who experienced a mental health crisis. Although the report was produced three years ago and PPD may have made additional progress since that time, several conclusions from the report are noteworthy. First, 54% of police respondents said they would be interested in additional training for responding to calls dealing with individuals with other types of disabilities (not just mental health). Second, while 43.9% of officer respondents received training on interacting with people with mental health issues within the last year, 22.5% had either never received or had not received training in four or more years. However, it is important to note that at the time of the report's release, 95% of PPD officers had completed crisis intervention training (CIT), up from 22.4% who indicated they were CIT trained at the time of the survey. Finally, when community members were asked about the PPDs response to them calling about a mental health crisis, 44.8% indicated the officer(s) made the situation worse, and 50.9% responded that when the PPD took them to jail, the officer(s) did not offer mental health assistance, and/or did not ask mental health questions before taking them to jail.[13] As previously noted, with strong agreement from both the community and law enforcement, this appears to be an area worthy of significant effort to improve outcomes between law enforcement and the community.

## 2.6 Officer-Involved Shooting (OIS) Incidents

In 2018, PPD was involved in 44 OIS, 23 of which resulted in the death of a person. As shown in Figure 5, 44 OIS events were the most during any calendar year dating back to 2009. Over this period, PPD was involved in an average of about 23 OIS events each year.

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[12] "Ranking the states," Mental Health America, 2019, Retrieved from http://www.mentalhealthamerica.net/issues/ranking-states (accessed March 11, 2019).

[13] "Phoenix community needs assessment on crisis response for people with mental illness," The Phoenix Mayor's Commission on Disability Issues, 2016.

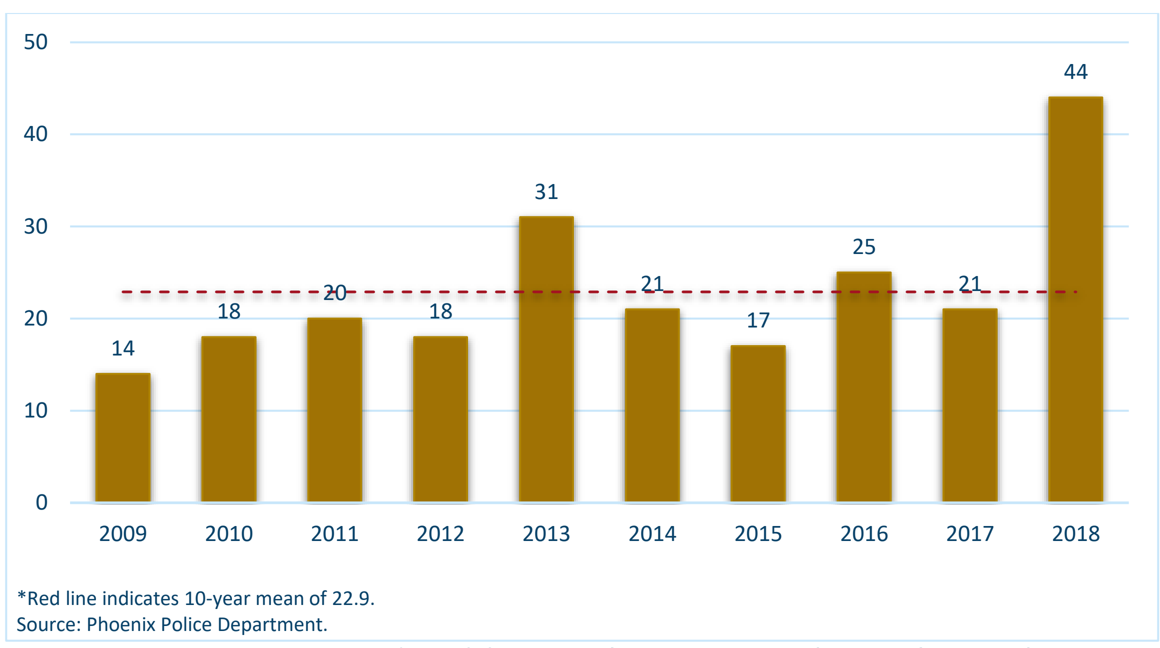



***Figure 5: Total Number of PPD OIS incidents (Fatal and Non-Fatal) by Year (2009-2018)***

Empirical studies of police use of deadly force demonstrate that these incidents are an extremely rare occurrence of police-community interactions.[14] [15] [16] For example, the Bureau of Justice Statistics estimated in 2015 that about 53.5 million people aged 16 or older experienced some form of contact with the police during the previous 12 months. Of these interactions, an estimated 985,300 (or 1.8%) involved the threat or use of *nonlethal* force by officers.[17] Although it is currently not possible to determine how many officers fire their guns at subjects each year nationwide, we do know that approximately 1,000 people die each year as a result of police gunfire.[18]

In 2018, PPD responded to approximately 665,000 dispatched calls for service, which included a variety of calls about potentially dangerous scenarios (e.g., shots fired, domestic violence, fights, armed robbery alarms, mentally ill persons, etc.). In addition, roughly 70,085 Part I crimes (including 12,111 violent crimes) were reported to PPD.[19] Still other police-community contacts were proactively initiated by PPD officers. Thus, upon interacting with community members in hundreds of thousands of scenarios in 2018 – many of which were volatile and potentially dangerous, PPD officers fired their guns at subjects on 44 occasions. Our intention in discussing these figures is not at all to dismiss the significance of OIS events, but rather to illustrate how seldom these tragic events occur, making rigorous statistical analysis to identify exact causes and correlates in a single community substantially more challenging, particularly when multiple years of data may not be available or comparable across years.

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[14] "Injuries associated with police use of force," by W. P., Bozeman, J. P., Stopyra, D. A., Klinger, B. P., Martin, D. D. Graham, D. D., J. C., Johnson III, ... and S. J., Vail, 2018, *Journal of Trauma and Acute Care Surgery*, 84(3), 466-472.

[15] "Is there evidence of racial disparity in police use of deadly force? Analysis of officer-involved fatal shootings in 2015-2016," by J., Cesario, D., Johnson, and W. Terrill, 2018, *Social Psychological and Personality Science*, advance online publication.

[16] "Perils of police action: A cautionary tale from US data sets," by T.R. Miller, B.A. Lawrence, N.N. Carlson, D. Hendrie, I.R. Rockett, and R.S. Spicer, 2017, *Injury Prevention*, 23(1), 27-32.

[17] "Contacts between police and the Public, 2015," by E. Davis, A. Whyde, and L. Langton, 2018, U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, (accessed March 11, 2019, https://www.bjs.gov/content/pub/pdf/cpp15.pdf).

[18] "Disparity does not mean bias: Making sense of observed racial disparities in fatal officer-involved shootings with multiple benchmarks," by B. Tregle, J. Nix, and G.P. Alpert, 2019, *Journal of Crime and Justice*, 42(1), 18-31.

[19] The figures were from the Phoenix Police Department reported Uniform Crime Report numbers reported to the Federal Bureau of Investigation for 2018.

## 2.7 Phoenix Police Department (PPD) Compared to Other Large Agencies in the United States

How did PPD's 2018 experience compare to other agencies in the United States in terms of OIS? To provide this context, we turned to *The Washington Post's* "Fatal Force" data, which is publicly available and has been collected since 2015. Specifically, *The Post* has documented all known incidents "in which a police officer, in the line of duty, shoots and kills a civilian."[20] Their database provides the most accurate tally of fatal OIS currently available. It suggests that, on average, 986 people have been shot and killed by police officers each of the last four years across the US. It is important to bear in mind that these data capture only fatal shootings; that is, the data fail to capture OIS events that do not result in the death of a community member. Unfortunately, there is currently no national database that includes both fatal and nonfatal OIS, and thus, the best we can do at the national level is examine trends in fatal OIS.

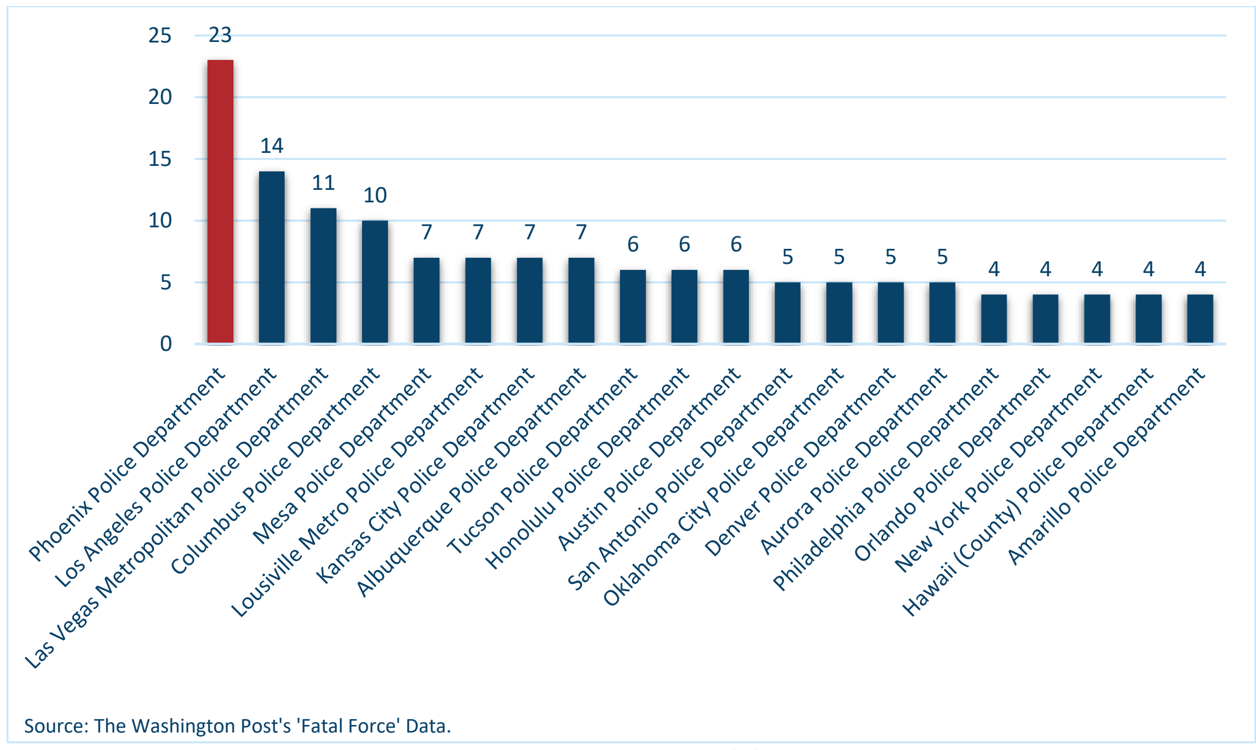



***Figure 6: Agencies with the Most Fatal OIS Incidents in 2018***

Focusing on 2018, Figure 6 indicates that PPD's involvement in 23 fatal OIS outpaced all other municipal agencies – none of which was involved in more than 14. Notably, many of the twenty agencies that had the most fatal OIS in 2018 serve large metropolitan areas. This is unsurprising, since these areas are more heavily populated and tend to experience higher rates of crime than less populous areas. These conditions lead to a greater number of police-community member interactions. As such, we accounted for variation in each of these 20 jurisdiction's populations, which ranged from approximately 195,000 (Hawaii County, HI) to 8.5 million (New York, NY). Figure 7 displays each of these agencies' fatal OIS rates, adjusted for population, which we calculated as follows:

$$\left(\frac{Number\ of\ Fatal\ OIS\ in\ 2018}{Average\ Population\ per\ year\ from\ 2015-2017}\right) \times 100{,}000$$

[20] See https://www.washingtonpost.com/graphics/2018/national/police-shootings-2018/?utm_term=.730a178f0d56. Phoenix Police Department data captures 22 fatalities. PPD had an additional OIS case where a fatality occurred in 2018. However, the fatality was from a self-inflicted gunshot by the subject and not rounds from the officers. As a result, it is classified as an OIS by PPD, but not a fatality since the outcome was not from officer rounds.

When accounting for variation in the size of these 20 agencies, PPD's 1.44 fatal OIS per 100,000 population in 2018 ranked 6th among municipal agencies in the United States. Over the last three years, PPD has served a jurisdiction of approximately 1.60 million, according to the FBI's Uniform Crime Report. Among these twenty jurisdictions, Austin (approx. 955,000), Honolulu (approx. 995,000), and San Antonio (approx. 1.5 million) most closely resembled Phoenix in terms of overall population, but ranked 15th, 16th, and 18th, respectively, in terms of fatal OIS per 100,000 population in 2018. Meanwhile, the NYPD – serving the largest jurisdiction in terms of population by far – had just .05 fatal OIS per 100,000 population in 2018. This suggests that PPD's 23 fatal shootings in 2018 were not merely a function of it being a large city.

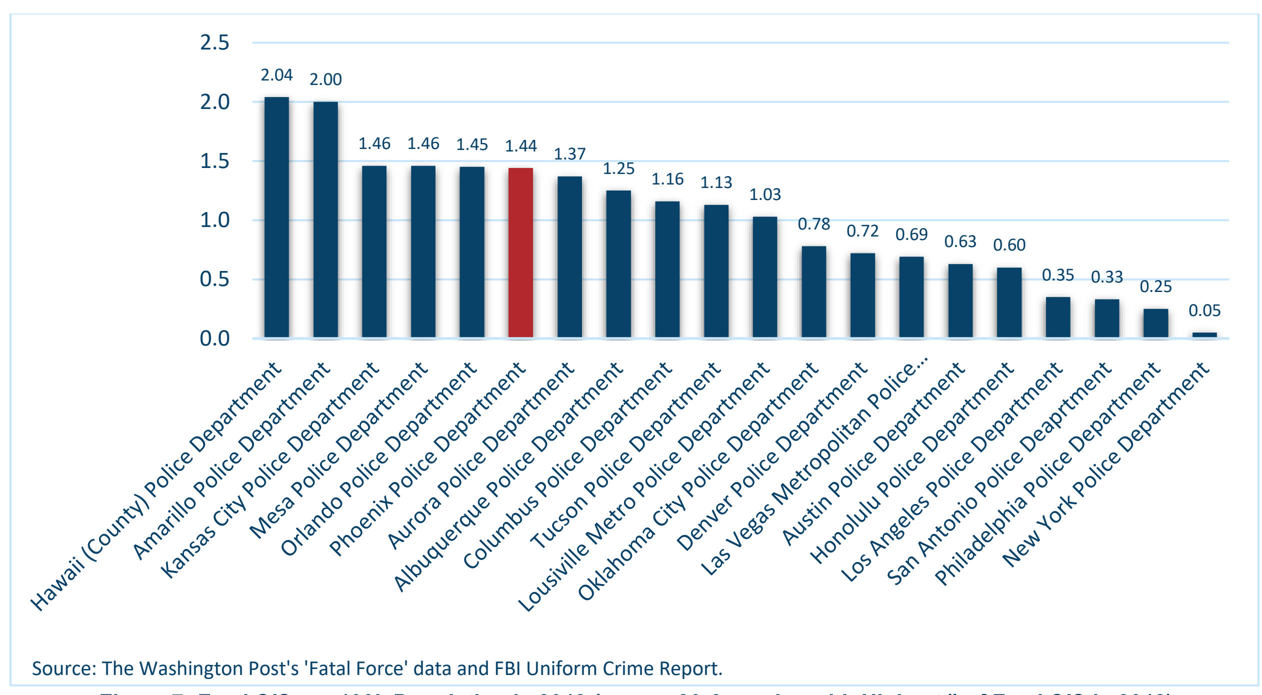



***Figure 7: Fatal OIS per 100k Population in 2018 (among 20 Agencies with Highest # of Fatal OIS in 2018)***

While calculating a population-adjusted fatal OIS rate is superior to comparing simple counts of fatal OIS, it is not without limitations. Namely, using a jurisdiction's population in the denominator of the rate formula assumes that everyone in the jurisdiction has an equal likelihood of interacting with a police officer, and thereby equal exposure to the risk of being fatally shot by a police officer.[21] [22] Research has consistently documented that this assumption is simply not the case.[23] [24] [25] [26] [27] Research also suggests that police use of any level of force is statistically rare, but

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[21] "Is there evidence of racial disparity in police use of deadly force? Analysis of officer-involved fatal shootings in 2015-2016," by J., Cesario, D., Johnson, and W. Terrill, 2018, *Social Psychological and Personality Science*, advance online publication.
[22] "Disparity does not mean bias: Making sense of observed racial disparities in fatal officer-involved shootings with multiple benchmarks," by B. Tregle, J. Nix, and G.P. Alpert, 2019, *Journal of Crime and Justice*, 42(1), 18-31.
[23] "Pulled over: How police stops define race and citizenship," by C.R. Epp, S. Maynard-Moody, D.P., and Haider-Markel, 2014, University Chicago Press.
[24] For example, Hickman et al. (2008) estimated that nationwide, police use non-lethal force in roughly 20% of arrests.
[25] "An analysis of the New York City police department's "stop-and-frisk" policy in the context of claims of racial bias," by A. Gelman, J. Fagan, and A. Kiss, 2007, *Journal of the American Statistical Association*, 102(479), 813-823
[26] "Effect of suspect race on officers' arrest decisions," by T.R. Kochel, D.B. Wilson, and S.D. Mastrofski, 2011, *Criminology*, 49(2), 473-512.
[27] "Measuring disparities in police activities: A state of the art review," by M.R. Smith, J.J. Rojek, M. Petrocelli, and B. Withrow, 2017, *Policing: An International Journal of Police Strategies & Management*, 40(2), 166-183.

more likely to occur when there is evidence that a crime has been committed.[28] [29] Police are more likely to use deadly force, in particular, in response to perceived lethal threats.[30] [31] [32] [33] [34]

With such findings in mind, a better way to make sense of variation across agencies in terms of fatal OIS is to calculate a violent crime-adjusted fatal OIS rate. In other words, cities that experience higher levels of community violence on average might be expected to, in turn, experience fatal OIS more frequently. Accordingly, we combined three years (2015 – 2017) of violent crime data (i.e., homicides, rapes, robberies, and aggravated assaults) for each of the top 20 OIS agencies from the FBI's Uniform Crime Report. Figure 8 displays each of these agencies' fatal OIS rates, adjusted for violent crime, which we calculated as follows:

$$\left(\frac{Number\ of\ Fatal\ OIS\ in\ 2018}{Average\ \#\ of\ Violent\ Crimes\ per\ year\ from\ 2015-2017}\right)\times 1{,}000$$

When adjusting for the average level of community violence, PPD's 2.12 fatal OIS per 1,000 violent crimes ranks 7th among these twenty jurisdictions, and does not stand out as much from the other 19 as it would appear based on simply comparing the total number of fatal OIS (i.e., without adjusting for community violence).

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[28] "Departmental and citizen complaints as predictors of police coercion," by J.D. McCluskey, and W. Terrill, 2015, *Policing: An International Journal of Police Strategies & Management*, 28(3), 513-529.
[29] "Police education, experience, and the use of force," by E.A. Paoline III, and W. Terrill, 2017, *Criminal Justice and Behavior*, 34(2), 179-196.
[30] "Philadelphia Police Shootings 1978-78: A system model analysis," by J.J. Fyfe, 1980, Civil Rights Division. Washington, DC: US Department of Justice.
[31] "Shootings of and by Chicago Police: Uncommon crises—Part I: Shootings by Chicago Police," W. Geller, and K. Karales, 1981, *Journal of Criminal Law and Criminology*, 72, 1813–1866.
[32] "Race, crime, and the micro-ecology of deadly force," by D. Klinger, R. Rosenfeld, D. Isom, and M. Deckard. 2016, *Criminology & Public Policy*, *15*(1), 193-222.
[33] "A bird's eye view of civilians killed by police in 2015: Further evidence of implicit bias," by J. Nix, B.A. Campbell, E.H. Byers, and G.P. Alpert, 2017, *Criminology & Public Policy*, *16*(1), 309-340.
[34] "Identifying situational predictors of police shootings using multivariate analysis," by M.D. White, 2002, *Policing: An International Journal of Police Strategies & Management,* 25(4), 726-751.

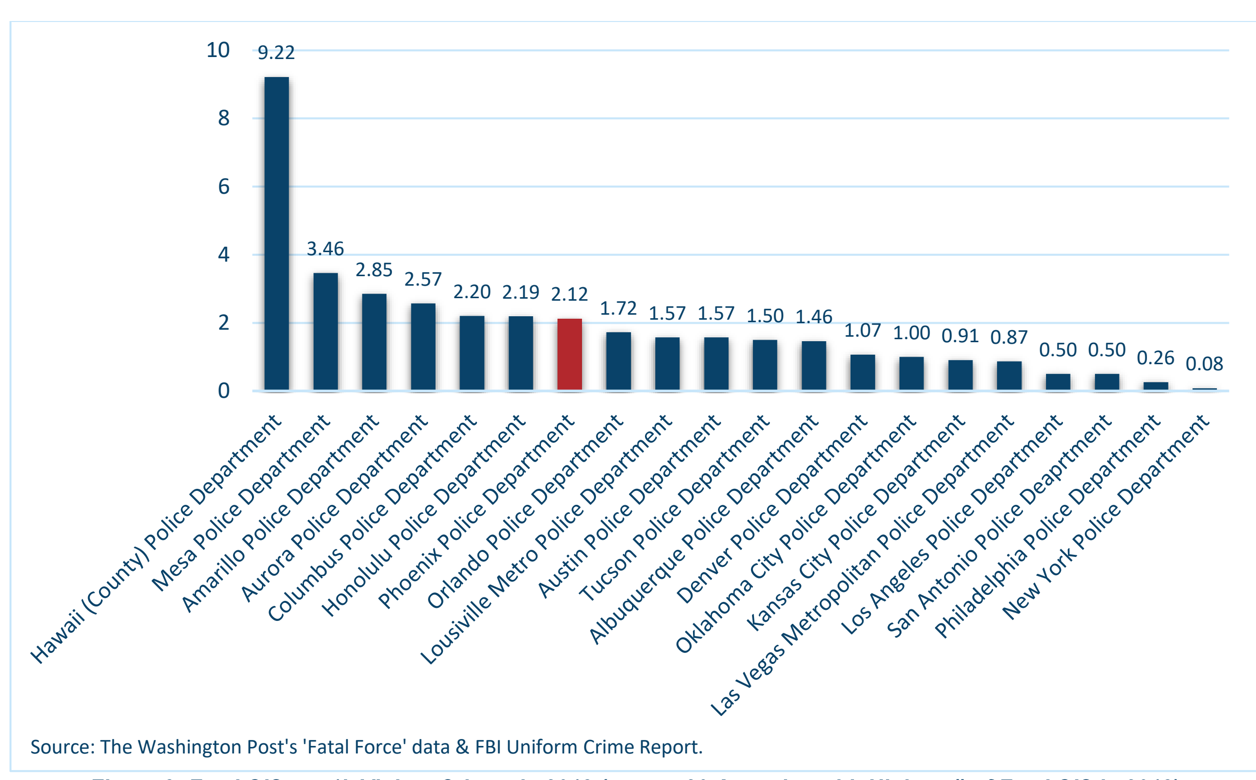



***Figure 8: Fatal OIS per 1k Violent Crimes in 2018 (among 20 Agencies with Highest # of Fatal OIS in 2018)***

## 2.8 Phoenix Police Department (PPD) Compared to Other Agencies in Arizona

A related question is how PPD's 23 fatal OIS in 2018 compare to other agencies in Arizona. According to *The Washington Post,* 63 fatal OIS occurred in Arizona in 2018, at a rate of 9.36 per 1 million populations. This population-adjusted fatal OIS rate ranked third among all states, behind only New Mexico (9.59 per 1 million) and Alaska (9.50 per 1 million).[35] Furthermore, both the Tucson and Mesa Police Departments (involved in 6 and 7 fatal OIS, respectively, Figure 9) were among the twenty agencies with the most fatal OIS in the United States in 2018. In light of these figures, additional context may be gleaned by comparing PPD's 23 fatal OIS in 2018 to other jurisdictions in Arizona.

Figure 9 displays the 17 municipal agencies in Arizona that were involved in one or more fatal OIS in 2018.[36] PPD's 23 fatal OIS outpaced the other agencies in the state, but as previously mentioned this is at least partially due to its much larger population. As such, we created population and violent crime-adjusted rates for these 17 agencies. We use similar formulas as above, only in the case of the violent crime adjusted OIS rate, we multiply by 100 (instead of 1,000) since so many of the Arizona agencies being compared experience far fewer than 1,000 violent crimes annually.

[35] From 2015 to 2018, Arizona's yearly average of 7.14 fatal OIS per 1 million citizens ranked 4th among all states, behind New Mexico, Alaska, and Oklahoma. See "Where the 2018 shootings took place," https://www.washingtonpost.com/graphics/2018/national/police-shootings-2018/?utm_term=.95429479e28c.

[36] Note that these sum to 51 fatal OIS. Not pictured here are 4 fatal OIS involving federal task forces, 2 involving tribal agencies, 1 involving the Arizona Department of Public Safety, 3 involving the Pima County Sheriff's Department, and 2 for which the agency involved could not be determined. We restricted this analysis to municipal agencies so that we could obtain their crime and population data from the UCR (e.g., county populations are misleading because they include people residing in incorporated cities who are not served by county agencies).

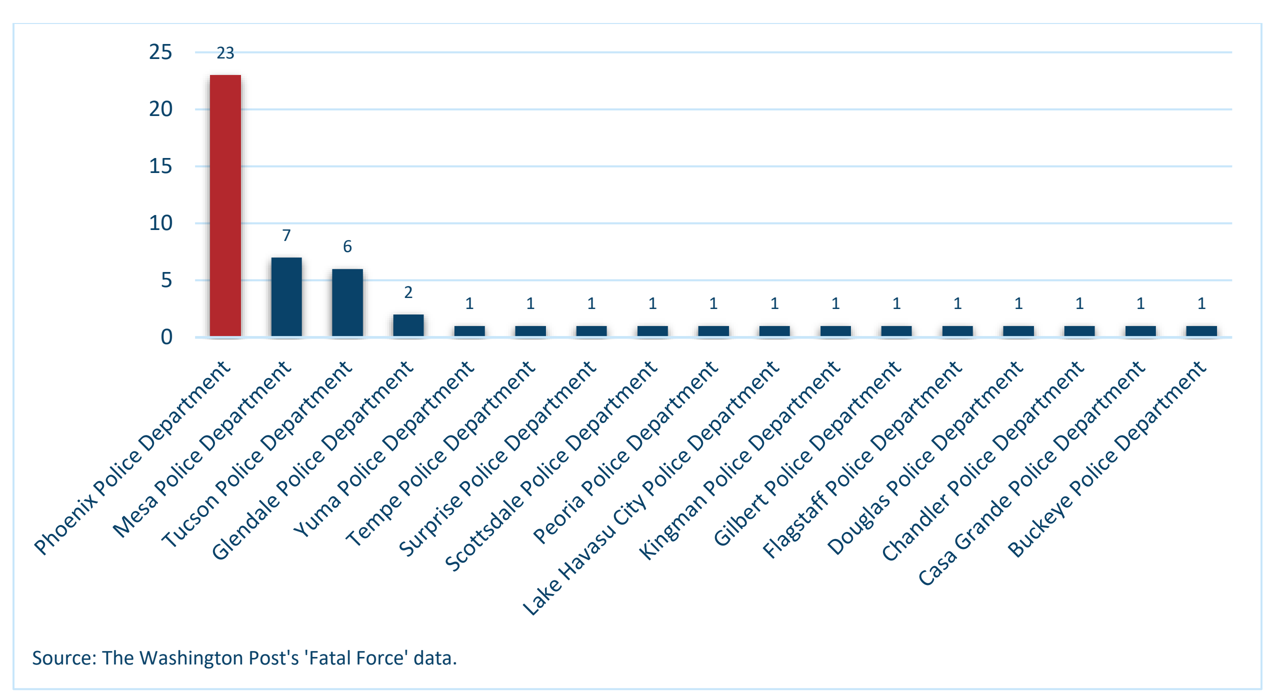



***Figure 9: Arizona Municipal Agencies Involved in One or More Fatal OIS in 2018***

Before discussing the rates, a word of caution is necessary. Many of these 17 agencies serve small jurisdictions wherein fatal OIS are much rarer than in large cities. Indeed, 13 of them had just one fatal OIS in 2018, and two of those had zero fatal OIS from 2015 – 2017 (as far back as *The Washington Post's* data go). Calculating rates based on one year of fatal OIS totals for these small agencies can give the appearance that they use deadly force at an alarmingly high rate. If data were available for each of these agencies for a longer period (e.g., 10 or more years), we could calculate average rates which would be more stable. Bearing this in mind, it is still informative to examine these one-year rates in order to account for the extreme variation among them in terms of population and community violence. While there are limitations, the data are important and do add context to the OIS in Phoenix.

Figure 10 displays population-adjusted fatal OIS rates for the 17 municipal departments in Arizona that had at least one fatal OIS in 2018. PPD's 1.44 fatal OIS per 100,000 population ranked 7th among these agencies, whose rates ranged from a low of 0.39 (Chandler Police Department) to a high of 6.09 (Douglas Police Department).[37] Figure 11 on the following page displays violent crime-adjusted fatal OIS rates for the same 17 departments. Here, PPD's 0.21 fatal OIS per 100 violent crimes ranked 12th.[38]

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[37] As mentioned, Douglas PD's OIS rate must be interpreted with caution, as its average population from 2015 to 2017 was only 16,421, and in reality it experienced only 1 fatal OIS in 2018. Its rate should be interpreted as meaning that if Douglas's population grew to 100,000, we would estimate there to be 5 additional fatal OIS. Similarly, Kingman's average population from 2015 to 2017 was 28,967 and there was 1 fatal OIS. Again, if Kingman's population swelled to 100,000, we would estimate an additional 2 to 3 fatal OIS.

[38] Again, the correct interpretation of these rates is immensely important. Buckeye and Douglas, for example, each experienced an average of just over 30 violent crimes per year from 2015-17, and each had just one fatal OIS in 2018. Given these realities, if we imagine that each city had experienced an additional 70 violent crimes in 2018, we would estimate each department would have an additional 2 fatal OIS.

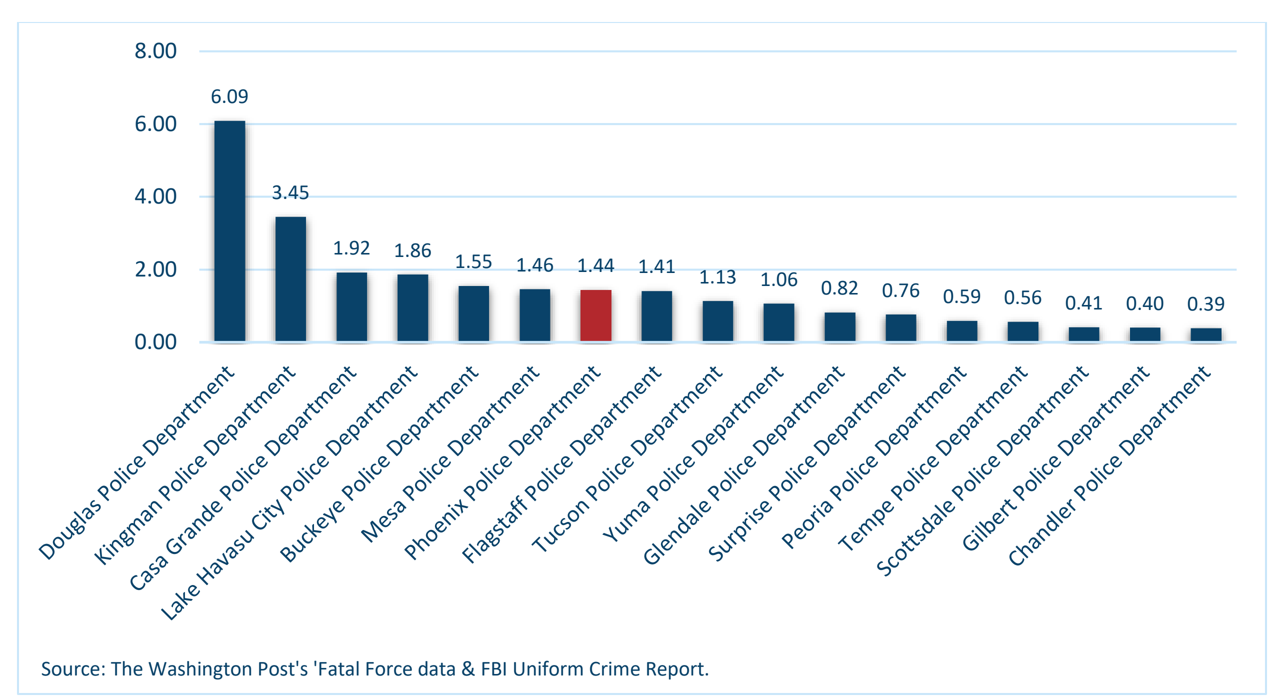



*Figure 10: Fatal OIS per 100k Population (among Arizona Agencies with one or more Fatal OIS in 2018)*

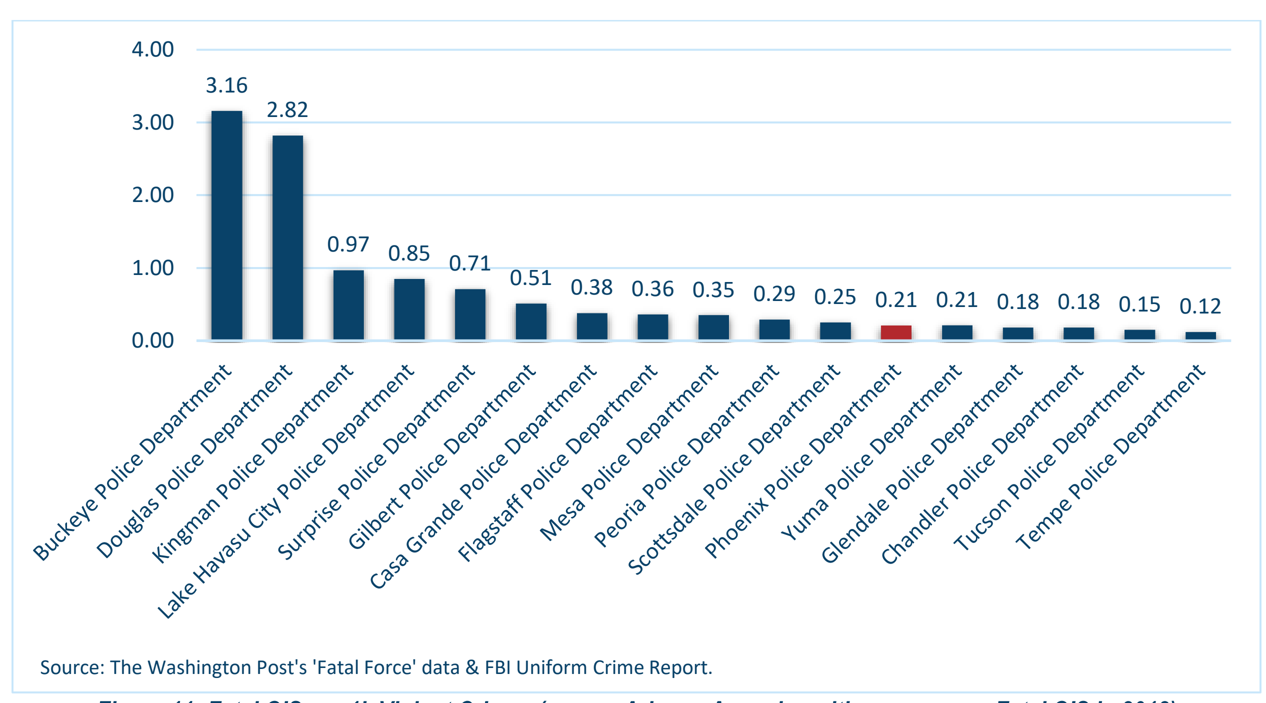



*Figure 11: Fatal OIS per 1k Violent Crimes (among Arizona Agencies with one or more Fatal OIS in 2018)*

## 2.9 Phoenix Police Department (PPD) Compared to Other Law Enforcement Agencies in Maricopa County

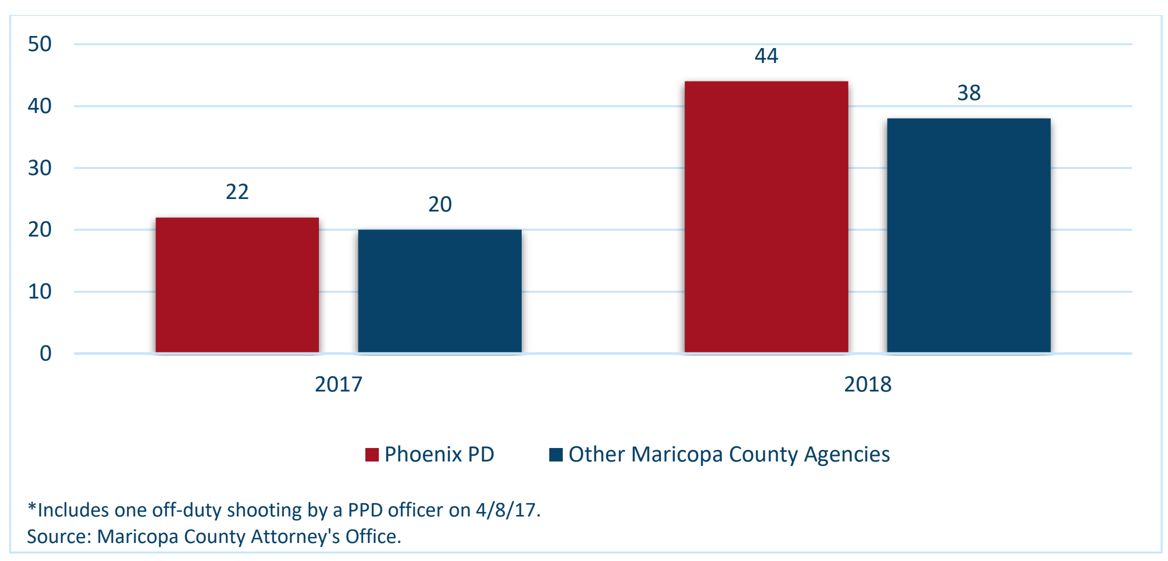



***Figure 12: OIS in Maricopa County, 2017-2018***

We also compared OIS by PPD to those by other law enforcement agencies in Maricopa County. For this comparison, we were limited to two years of data compiled by the Maricopa County Attorney's Office (MCAO). Unlike comparisons between other large agencies, or other agencies in Arizona, these data include all OIS, both fatal and non-fatal. As Figure 12 illustrates, OIS increased not only by PPD (from 22 to 44, or an increase of 100%), but by other agencies in the county as well (from 20 to 38, or an increase of 90%). The Buckeye, Chandler, Gilbert, Goodyear, Mesa, Peoria, Scottsdale, Surprise, and Tempe Police Departments were each involved in more OIS in 2018 than they had been in 2017. Similarly, the Department of Homeland Security was involved in an OIS in 2018, but not 2017.

## 2.10 Key Takeaways

The key takeaways from our analysis of PPD's fatal OIS events relative to other jurisdictions in the United States, Arizona, and Maricopa County are as follows:

1. PPD led the nation in fatal OIS events in 2018. However, among the 20 municipal agencies that had the most fatal OIS in 2018, PPD ranked 6th and 7th, respectively, when we calculated population- and violent crime-adjusted fatal OIS rates.
2. Sixty-three fatal OIS occurred in Arizona in 2018. Arizona's population-adjusted fatal OIS rate of 9.36 per 1 million population ranked 3rd among all states.
3. PPD's 23 fatal OIS were the highest among 17 municipal agencies in Arizona that had at least 1 fatal OIS in 2018. However, PPD ranked 7th and 12th, respectively, when we calculated population- and violent crime-adjusted fatal OIS rates.
4. From 2017 to 2018, OIS increased throughout Maricopa County – not just in Phoenix.

In 2018, PPD and several other agencies were among those with the highest OIS nationally. Yet, the MCAO's data suggest that PPD was not the only agency in Maricopa that experienced an increase in OIS events in 2018. Several other agencies in the area experienced an increase, and in fact, even with PPD's OIS excluded, Maricopa County still experienced a greater number of OIS in 2018 than in 2017. Collectively then, these findings provide preliminary evidence that factors external to PPD may have been at least partially responsible for the increase in PPD's 2018 OIS, relative to years past.

The scope of this City of Phoenix-funded study was to analyze PPD's use of deadly force. It did not include a broader analysis of community perspective or examination of environmental factors such as the prevalence of mental health needs, nor did it allow for more engagement with the community.[39] However, as a first and important step toward gaining a deeper understanding of the policing context in Phoenix in 2018, we spoke with a variety of community organizations, members, PPD officers and associations. In the sections that follow, we review the insights gleaned from those discussions, though it is important to note that these insights deserve much further exploration and consideration to become actionable.

[39] The City has entered into an agreement with Arizona State University's Watts College of Public Service and Community Solutions to engage Phoenix communities.

## 3. Stakeholder Perspectives on OIS Trends

An increase in use of force, and particularly deadly force events, within any agency brings concern and inquiry on what is driving the change. It is common and expected that those impacted directly and indirectly may have diverging views on causal factors and correlates, which are usually very difficult to align due to different perspectives and the fact that deadly force incidents are, statistically speaking, quite rare events, making definitive and scientific causal research much more challenging.

Regardless, it remains vitally important to seek and listen to the perspective of those impacted and attempt to incorporate the perspectives into the analysis. In fact, these perspectives were used throughout the study period to inform our inquiries and analysis wherever possible within the limits of the data and scope of the study.

In August 2018, at the start of the study, the research team met with approximately eight community members and community organization representatives. As this was during an introductory visit to Phoenix, and the analysis and data collection plans were still to be determined, but the meeting allowed the research team to hear community views, receive a list of proposed questions from the community that many felt were important to answer within the study, and begin to learn about the community and context in Phoenix and surrounding areas. At the conclusion of the initial analysis period, the research team conducted brief phone interviews with many of the same representatives and others whom PPD identified as among the stakeholders on the issue of OIS. Some community groups' representatives also recommended we reach out to a respected public defender, whose interview was conducted the following week.

Just as it is important to understand the community's perspective, it is also important to hear from officers. The research team also conducted group interviews with officers and supervisors in the PPD, and PSB investigators. Participants were selected by one of two police associations in Phoenix. The interviews were not meant to be exhaustive in identifying representative viewpoints. Instead, they were intended to provide voice to differing perspectives on factors contributing to OIS events and the increase in 2018. The officers and supervisor focus groups were conducted in November 2018 and the community interviews were conducted in January 2019.

### 3.1 Community Perspectives

Researchers met with selected Phoenix community members and organizations as a group in August of 2018 and conducted open-ended and semi-structured interviews in January 2019 to solicit ideas and concerns. The initial meeting was a broad-based discussion of the project, including what the community members thought might be contributing to the rise in OIS. The individual community organization leader interviews addressed the following items:

- Factors that might be unique to 2018 that could have caused such an increase;
- Whether the issue is a Phoenix problem, or something viewed as valley-wide;
- Whether there was a point in time when the community noticed changes that could have impacted OIS incidents, or police-community relationships;
- If there are common factors observed in OIS incidents, such as locations, scenarios, officers, or the community; and,
- Whether there might be other contributing factors, or questions we did not ask that the community member felt was missed in the discussion.

To protect anonymity and at the request of at least one representative who expressed concern over our interview being proffered as a substitute for more extensive community engagement or giving the appearance of a closer engagement on the study, the identity of any individual or community group that participated will not be included in this study.

In the following sections, key themes that developed from these community contacts are outlined. Long-term and acute issues, both in Phoenix and through the country are discussed. What community members feel are important factors in OIS incidents, and suggestions on what PPD can do to improve, are outlined. The meetings and interviews with

officers and community members are not representative or sufficient to be considered comprehensive or to provide statistically significant data.

## 3.11 How did we get here?

The members of the community were asked to provide their perspectives on factors that may have contributed to the 2018 spike in OIS incidents. Though some responded more generally regarding the use of force, the topics independently raised by community representatives during the discussions included:

- The "Joe Arpaio effect" or "Sheriff Joe effect," a term that the community used, refers to former Maricopa County Sheriff Joe Arpaio's hard line or "zero tolerance" approach. Community members' perspective suggests that through his approach, which included aggressive immigration enforcement and allegations and initial court rulings of racial profiling, a divide was created between police and the community that remains today. Community members reported that although they recognize that PPD and the Maricopa County Sheriff's Office (MCSO) are two different agencies, they often cannot tell the difference between PPD officers and Maricopa County deputies. Further, some in the community alleged that many deputies hired and trained under Sheriff Arpaio have since been hired by the PPD.
- Social media sentiments shared by local police association figures were cited by the community as evidence that Phoenix police officers were supportive of the "Sheriff Joe" approach to policing and were contrary to demonstrating care and regard for the community and accountability.
- Concerns regarding the culture of the PPD, which some (but not all) suggested was not supportive of the community or the need for internal accountability.
- Concerns with Chief Williams' early statements regarding the increase in deadly force in which she cited the rise in assaults on officers. Some in the community believe these statistics are an attempt to distract or are artificially inflated as "cover charges" for use of force. Some pointed out that an assault on an officer charge in Phoenix does not require physical contact and is therefore an easy charge to make, causing the statistics to be more difficult to interpret.
- Suggestions that training provided to officers is insufficient, does not encourage the use of appropriate alternatives to deadly force or is simply poor training. Others commented that there is an overreliance on training as the solution to many problems and is used as a way of deflecting criticisms by saying that "further training will be provided or is needed."
- Lack of accountability within PPD generally, and specifically, for officers involved in deadly force incidents. Some in the community expressed their views that the internal PPD investigative and disciplinary processes are flawed by design, rarely if ever producing findings of culpability or error and that even external investigative processes conducted by the County Attorney's Office were predisposed to supporting officers' decisions.

Although the representatives of the community seemed to agree with each other during the initial meeting in August 2018, in the interviews conducted during January of 2019, some offered divergent views and at least one person suggested there is not total agreement among the community regarding views on PPD or the factors cited above. Several others noted that the reason "why" the OIS incidents have increased in 2018 is more abstract or attributable to broader social tensions than anything that could be found in the data, which is similar to what is expressed by officers in the following section.

## 3.12 Long-term Issues

Several long-term issues were cited by members of the community during our interactions. Many of these issues have been well documented by the media, not just locally, but also nationally. In addition to sentiments related to the "Sheriff Joe Arpaio Effect," some also mentioned lingering tensions from events in Ferguson, Missouri after the 2014 OIS death of Michael Brown. The issue of continued tensions fueled in part by high-profile events and figures and the "Ferguson Effect" is one issue where community members and officers tend to agree.

In our initial meeting, one of the issues brought up by the community was Senate Bill 1070 (SB 1070). SB 1070 was passed in 2010, which increased tensions between immigrant groups and the police – particularly the MCSO, then under the leadership of Sheriff Joe Arpaio. The bill required law enforcement to check the immigration status of any individual they reasonably suspected of being in the United States illegally. Arpaio was an outspoken supporter of the bill. As shared by the community, Arpaio's sentiment was clear long before the bill took effect and the rhetoric was simply more acceptable after the passing of SB 1070. His reputation as "America's Toughest Sheriff" led to a ripple effect across the valley, that influenced the way community members felt about law enforcement and in their eyes, made it challenging for community members to separate Phoenix law enforcement officers from those in the MCSO. This phenomenon was generally referred to by the community as the "Arpaio Effect". It should be noted that Sheriff Arpaio left office in 2016, therefore, we presume, it is likely not the community's assertion that he caused the 2018 spike in shooting incidents but that a lingering cultural effect of his tenure and approach continued to influence law enforcement in the region.

Community members also cited the effects of the events in Ferguson, Missouri as having an effect in Phoenix. On August 9, 2014, Michael Brown was shot and killed by an officer from the Ferguson Police Department. The unrest in Ferguson spread and fueled tensions in many communities and according to the community interviews the reactions were felt as strongly in Phoenix as they were on the streets of Ferguson. As one community member put it: "I mean, if we go back to Ferguson, I think late 2014…obviously we saw this issue become a galvanized issue and there was direct impact locally." While the term "Ferguson Effect" is often used to describe the reaction of police officers to the increased scrutiny and attention from the media and public protests, it can also refer to the community losing trust in law enforcement – even though the incident occurred over fourteen hundred miles away. One community member proposed that,

> *"Part of this is just the inherent nature of social networking…every person with a camera is a camera person…but these things have been going on for decades. It's not necessarily new. What's new is we're watching them live streamed. There's a much clearer picture – it's no longer the word of an officer against the dead, it's officer vs. camera/body cam. Because we're seeing discrepancies, that too, I think, is feeding the tension."*

This is strikingly similar to an observation made by one of the police officers during the focus groups.

Finally, although they did not provide specific examples, community members told our team that they perceive a "deep-seated culture of violence," and a lack of transparency and accountability from the PPD. Their concern with the recent increase in hiring new officers is that without a change in culture, new recruits will perpetuate this cycle. This brings us to more recent, or acute issues that community members reportedly feel may have led to an increase in the number of OIS, or at the very least, increased tensions with the community.

### 3.13 Acute Issues

The NPF team asked participants what recent changes they have seen that could have contributed to the precipitous increase in OIS incidents in 2018. One community group alerted us to some changes in training from 2017 to 2018 that they believe have contributed to the spike in OIS incidents. From one year to the next, training on decision-making was reduced, and more firearms training was added. Others argued that a lack of consequences and discipline, not just by the police department, but by the County Attorney, and state legislature have contributed. Still others remarked that once the OIS rise was evident in 2018, the Chief became "adamant publicly and privately that this was a community problem – people were actively and aggressively attacking officers, and it built a narrative…that officers were under attack at extraordinary rates," said one member of the community. Pointing the finger at the community, they argued, just increases the tension, and did nothing to change the situation.

There was also sentiment that a level of fear and strain exists from not being heard by the department, leading to higher levels of distrust. One member stated that there is also a higher level of community awareness, and that through this

awareness, in 2018 they "saw more of a divergence from the community's trust in law enforcement, and law enforcement's trust for the community."

### 3.14 Common Factors of Officer-Involved Shootings

When asked about the common factors of these OIS incidents, answers ranged from "no particular pattern" to people of color being affected at an inequitable rate, and an assessment that people are distraught and more willing to "go toe-to-toe" with police.

### 3.15 This is Not Unique to Phoenix Police Department

Although there was not much of a consensus on the first two topics discussed above, most of the individuals we spoke to agree on this point – this is not an issue that is isolated to the PPD. They noted that while it is a valley-wide issue, it is also a nationwide issue.

### 3.16 Specific Suggestions for Improvement

These meetings provided an opportunity for the research team to ask community representatives what changes they believe are needed by PPD as it relates to transparency, accountability, community engagement, police responsibility, and training. A number of suggestions were offered to better engage with the community and be proactive in responding to officer-involved shootings.

Concerns around statistics inflated by what are perceived to be "cover charges," the need for transparent validation of data on assaults on officers, and lack of information and data sharing were cited by most of the community members interviewed. This relates to the notion that the department is not being transparent or accountable and led to calls for civilian oversight enhancements. One individual we talked to helped us gather information from a number of defense attorneys, many of whom brought up resisting arrest charges as a concern. As one individual put it, "resisting arrest is tacked on as a means of coercion…to get a plea agreement." Another suggested that researchers should look into the number of days that pass before a resisting arrest charge is filed. The reason for this, they say, is that after 180 days, it is too late for a suspect to initiate a notice of claim against the city for unlawful use of force. However, participants acknowledged that while there is suspicion about that, they do not know for sure whether it occurs. It is merely an anecdotal perspective of individuals who have been involved in cases where resisting arrest charges have been attached.

Although the general community sentiment was that the PPD should "stop shooting people," they also agreed that there are ways that the department can be more proactive about routinely engaging the community before and after an OIS incident. At least one community member offered in interviews that some community groups and members are likely to be skeptical of anything that comes from the department, but they want to be heard, and the Chief should not have to be worried about stepping on the toes of the police associations. To expand on this last point, one community member explained that they cannot distinguish between the messaging of the officer associations and the messaging of the department. They argue that the department is fearful of the political power of the Phoenix Law Enforcement Association (PLEA), and therefore is unwilling to counter the messaging of PLEA leaders.

Another key issue that resonates with the current sentiment of many community members is that law enforcement locally and nationally should not be the organization responding to such a wide variety of calls for service. Specifically, many calls would be better managed by mental health practitioners. "Sometimes," one community member mused, "you just don't need a gun." There seems to have been a transition to this expectation that the police are there to help with anything and everything and be problem-solvers with many hats. Perhaps this perception of what the police are supposed to do is misguided. Although it is common in today's policing environment to find officers with crisis intervention training, the training is often provided to only a small number of officers in a given department. Even with this training, law enforcement typically has limited resources and tools to call on should the situation become potentially threatening or occur outside of normal business hours when other agencies may not be available to intervene. "The real issue is a need for Crisis Intervention Training – it's not fair to police officers, is my view of it. Well intentioned people (officers) try to do the right thing, but they don't know how," was how one community member put it.

Finally, common views among the community members – despite being critical of the idea that training is the answer for many problems - is a call for more training in de-escalation and deflection.[40]

## 3.2 Officer Perspective

The NPF Team conducted officer interviews in a focus group setting to help expedite the process and because such a format often allows multiple participants to feel comfortable talking about sensitive topics. Focus groups also help researchers gather rich data because participants build off one another's comments. We conducted focus groups with three groups of Phoenix officers. First, we completed two focus groups with patrol supervisors. Each focus group had six supervisors (total = 12). The supervisor (all sergeants and lieutenants) focus groups were conducted at the Phoenix Police Sergeants and Lieutenants Association (PPSLA) office. Two PPSLA representatives were present during the focus groups. PPSLA invited supervisors to be part of the focus group and organized the meeting. The goal of these interviews was to obtain supervisors' perspective of OIS in Phoenix.

Second, we conducted two focus groups with patrol officers who had been involved in shootings in the past (i.e., no officers involved in shootings during 2018 were interviewed because most were still part of on-going investigations). Six officers participated in each focus group (total = 12) and the interviews were completed at the Phoenix Law Enforcement Association (PLEA) office. Two union representatives were present during each of the focus groups. PLEA coordinated the meetings and arranged for officers to participate. With these interviews, our goal was to gain perspective on OIS from officers who had been involved in OIS in the past.

Our final focus group included three officers assigned to PPD's Professional Standards Bureau (PSB). PSB is responsible for investigating all PPD OIS. As such, our goal with interviewing PSB members was to gain an understanding of OIS from the investigators' perspective.

In total, we completed five police focus groups that included 27 PPD officers. To help protect the anonymity of the participants, we did not track their demographic characteristics and will not attribute quotes. Each focus group lasted about 60 minutes and was guided by a semi-structured interview schedule. We focused the discussion on three issues: (1) have threats faced by PPD officers changed in recent years, (2) why has PPD experienced such a large increase in OIS in 2018, and (3) is the training PPD officers experience effective or do changes need to be made? Next, we discuss the themes that emerged from the focus groups concerning each of these issues. All results discussed in this study are based on PPD officers' perspectives. Direct quotes are provided as examples of many of the points.

### 3.21 Threats to Officers

This section centers attention on PPD officers' views concerning whether the threats they face on the street have changed in recent years.

#### *3.211 Mental Health*

The first theme that emerged across all focus groups was that participants believe one of the most significant changes patrol officers have faced in recent years is having to deal with more subjects who have mental health issues. Police across the United States increasingly have become responsible for dealing with mental health problems on the street. Inpatient and residential care for people with mental health problems has decreased substantially over the past three decades, while outpatient care and prescription drug use has doubled during the same period (SAMHSA, 2016). As one supervisor put it: "We have a mental health crisis in this country. It's bad. I mean, we see it on the streets."

Supervisors, officers with OIS experience, and PSB investigators all emphasized that declining mental health care access has contributed to more people on the streets with mental health issues and the police have become the primary problem-solver when such people cause difficulties in the community. An officer with OIS experience stated it this way:

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[40] Deflection is a term sometimes used to represent alternatives to arrest or diversion.

*"I think that people don't know where to turn for help, so their default is to call the police regardless of whether it's a subject with a gun, or someone misbehaving…And I don't think that number has risen, I think we have [more] access, we contact them more because of the demands that society has placed on policing in general."*

The problem, as one officer noted, is that individuals with mental health issues are difficult to predict: "you can't anticipate what they're going to do or how they're going to react." From the participants' perspectives, this creates many problems for officers and increases the possibility of dangerous situations that could lead to an OIS. One PSB officer put it succinctly:

*"The amount of people that are walking around downtown with mental health issues seems like it's really been on the increase in the last couple years…what's happening with those services? Maybe people that weren't on the street a couple of years ago are on the street now and some of the encounters that are leading to the increase in the officer-involved shootings."*

One of the supervisors echoed this view by arguing that because people call the police more often to deal with mental health problems "we're involved more often when it's some kind of mental health issue, period…we're on scene more often for situations that could lead to that [an OIS]."

Officers in each of the focus groups also noted that potential threats posed by individuals with mental illness are exacerbated by drug abuse concerns. In particular, participants noted the recent opioid epidemic in Phoenix has aggravated the mental health problem. One supervisor argued that "…mental illness is through the roof…and…opioid epidemic is through the roof." Another supervisor discussed this combined threat posed to Phoenix officers in this way:

*"…you combine the opiates and our mental health crisis where, it's not a policing problem, it's a national epidemic…15 years ago, serving mental health detention orders – nobody knew what that was. And that is a routine call for service for us [now]."*

This mental health and illicit drug threat also came up during our PSB focus group. In discussing the contributing factors to OIS, one investigator noted that drugs or mental health were almost always factors present in the suspects involved in shootings with PPD officers:

*"Almost 100% of the time seeing in their [suspects] blood, methamphetamines, cocaine metabolites and things of that nature. So, I think the prevalence of methamphetamine…last year, almost everyone where we had to get an ME [medical examiner] report, because unfortunately they [suspect] were deceased – drugs, alcohol, marijuana, or combinations thereof. And on those rare occasions you could almost correlate it where you didn't see that, there was documented long history of some sort of severe mental illness that we were able to find out later after we did the investigation."*

#### *3.212 Willing to Challenge Police Authority and the Ferguson Effect*

Another common theme that emerged from our interviews was that officers from all three groups believe that, over the past two years or so, community members have become more willing to challenge police authority. They believed that part of the explanation behind the increase in PPD OIS was a decline in respect for the police that has caused more police-community encounters to escalate and require force. One supervisor participant summarized this belief: "I think socially, it's more acceptable [in the past few years] to hate cops." Many of the participants in the supervisor and officer focus groups expressed concern over a general anti-authoritarian movement in recent years. A supervisor noted that more people over the past few years seem to "…take pleasuring in challenging [and] disobeying" police authority. Phoenix officers also tended to agree that this is a recent trend. One officer suggested that back in his/her day (the early 1990s) most people the police contacted would comply with orders but nowadays "…it's like a coin flip…it's 50/50…when you come up upon somebody whether they're going to do what you ask them to do."

Research over the past few years has found that the "Ferguson effect" has impacted officers across the United States. Part of the Ferguson effect hypothesis suggests that in the aftermath of several high-profile police killings of minority residents (e.g., Michael Brown in Ferguson, MO; Eric Garner in NYC; Walter Scott in North Charleston, SC), the public and media have become more antagonistic toward the police and critical of their actions.[41] [42] [43] [44] [45] [46] [47] Officers in our sample seem to have observed this trend in Phoenix. Like officers and supervisors in other jurisdictions, Phoenix officers believe some of their community members have become less supportive of the police and more antagonistic. The good news, however, is that many respondents in each focus group noted that it is a small segment of the Phoenix population that they must worry about becoming violent. One supervisor participant indicated that Phoenix police officers "…still have support from community members in general." This sentiment is also expressed by officers in other jurisdictions according to the research evidence.[48]

Naturally, our conversations turned to officers' perceptions of what has caused more antagonism and disrespect toward the police. Many respondents noted that the trend began around the time of Michael Brown's death in Ferguson, MO and believed that the media has stoked criticism of the police in the years since the incident. A supervisor noted that "Ferguson was kind of the start of it…it became a war cry…and absolutely the media had a lot to do with it." Respondents believed that incessant negative coverage of policing across the U.S. has emboldened people to be more willing to challenge police authority. Several respondents noted that this has created a false narrative that all police are bad, and this view is reinforced by the media and through social media. A supervisor added that such messaging to the public causes more people to believe "…I need to do something about this…I'm going shoot cops because they're killing all of my people."

Several respondents noted that the police have always faced criticism from the public. But, the difference over the past few years is that social media (e.g., Facebook, Twitter, and YouTube) allow people to share negative stories (and videos) about the police. For example, participants discussed historical problems the police have experienced with the public such as the civil rights movement and the Rodney King beating in Los Angeles, but as one supervisor suggested, "Now you multiply that, everybody has high-quality video and they have the ability to be their own editor." Respondents believed that social media has facilitated the spread of anti-police rhetoric to the point that many people believe "…it's okay to resist lawful authority…that they are acting righteously when they resist the police." Respondents believed that this has made their job more difficult and increased the likelihood of interactions escalating into uses of force. One officer put it this way:

> *"[It has become] more difficult to establish rapport with people because right out the gate, they didn't trust you. Not because they didn't know you, they didn't trust you because they heard a, b, and c happened in this other city in this other state, or they saw a YouTube video…so, you're automatically fighting an uphill battle right out the gate."*

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[41] "The war on cops: How the new attack on law and order makes everyone less safe," H. Mac Donald, 2017, Encounter Books.

[42] "Third-person perceptions, hostile media effects, and policing: Developing a theoretical framework for assessing the Ferguson effect," by J. Nix, J.T. Pickett, 2017, *Journal of Criminal Justice*, 51, 24-33.

[43] "Sensitivity to the Ferguson Effect: The role of managerial organizational justice," by J. Nix, S.E. Wolfe, 2016, *Journal of Criminal Justice*, 47, 12-20.

[44] "The impact of negative publicity on police self-legitimacy," by J. Nix, and S.E. Wolfe, 2017, *Justice Quarterly*, 34, 84-108.

[45] "Management-level officers' experiences with the Ferguson Effect," by J. Nix, and S.E. Wolfe, 2018, *Policing: An International Journal*, 41, 262-275.

[46] "Command-level police officers' perceptions of the "war on cops" and de-policing," by J. Nix, S.E. Wolfe, and B.A. Campbell, 2018, *Justice Quarterly*, *35*(1), 33-54.

[47] "The alleged "Ferguson Effect" and police willingness to engage in community partnership," by S.E. Wolfe, and J. Nix, 2016, *Law and Human Behavior,* 40, 1-10.

[48] "Behind the badge: Amid protests and calls for reform, how police view their jobs, key issues and recent fatal encounters between blacks and police," by R. Morin, K. Parker, R. Stepler, and A. Mercer, 2017, Washington, DC: The Pew Research Center. (accessed March 11, 2019, http://www.pewsocialtrends.org/2017/01/11/behind-the-badge).

### *3.213 More likely to be Violent toward and Use Guns on the Police*

According to our interviewees, having more people willing to challenge police authority has created more opportunities for people to be violent toward and use guns on the police. Participants in each of our focus groups believed that this was one of the most significant contributing factors to the recent increase in OIS in Phoenix. Supervisor respondents indicated that in the 1990s and early 2000s, it was common to go hands-on with subjects that would not comply with lawful orders. Over the past two years, however, they believe that "we're seeing more and more guns pointed at us." The supervisors also emphasized that in the past offenders would fight officers with the goal of escaping. Recently, however, it appears that subjects fight the police to cause harm: "Now, they fight to kill," as one officer put it. One of the PSB investigators echoed this sentiment when talking about recent PPD OIS incidents: "What we're seeing in my perspective…is…more propensity towards violence against officers more quickly in the encounter than I've experienced in my career…we're [quickly] going from 0 to them pointing a gun at us…this propensity for quick and utter violence is what has spiked it this year."

We cannot gauge whether the supervisors we interviewed had been involved in shootings in the past. However, it is interesting to note that the idea people are using guns against Phoenix officers more often was not mentioned during our focus groups with OIS-experienced officers as one of the new or changing threats PPD officers have faced in recent years. This may simply suggest that officers that have been directly involved in a shooting believe the risk of having a subject use a gun against an officer has always been high, or that they are not aware of the pattern or practice of OIS in PPD.

## 3.22 Why Has Phoenix Experienced a Large Increase in OIS?

The second portion of the focus group interviews focused on why participants felt that Phoenix, specifically, experienced such a large increase in OIS during 2018. First, it is important to note that one interviewee from PSB noted that this seems to be a valley-wide problem and is not idiosyncratic to PPD: "It's not something that's been unique to Phoenix this year, it's unique to the whole valley area…I think everybody has kind of seen an increase in officer-involved shootings." This assertion is consistent with the MCAO data provided, showing an increase in OIS in PPD and other departments in the county.

### *3.221 Need More Officers*

At the same time, however, all focus group participants had various opinions concerning why their agency had experienced a high number of OIS. The first explanation that emerged during our discussions was that PPD has a shortage of officers. Several of the supervisors noted that Phoenix officers are trained well and skilled at de-escalation. The problem is that often too few officers are on scene to de-escalate effectively. A supervisor put it this way: "I mean when I was on in 07-08-09, we would have six or seven people show up to calls…Now, you have one or two." According to the participants, this is problematic because having the ability to show up on scene "…with more people in the frontend…may change the dynamics of the situation…it doesn't become violent" (supervisor quote). Another supervisor was clear regarding why he believed Phoenix needs more officers:

> *"We are super busy, and if we, I mean, literally if we had more officers per capita…I would say most of the officer-involved shootings that have occurred this year, I bet there's only 2 or 3 officers on the scene. If that. You know, and I think what we're seeing, officers want to do a good job and for the most part, most of them do a good job, but they might be the only one rolling to a violent call and [their backup] might be coming from freaking ten miles away…[and] these bad guys not seeing a wolf pack of cops coming, so they feel, shit man, it's only one or two cops, I can, I'll try to do something."*

These are interesting points because most contemporary law enforcement training on de-escalation focuses on officers' social interaction skills and tactical proficiency. While important, this does not address a fundamental need of having enough officers to handle a situation. None of the officers in our OIS-experienced focus groups mentioned the lack of officers on the department as a cause of the spike in OIS. However, an investigator with PSB noted that "They're doing the best they can but literally, the academy needs to be twice the size with twice as many people [new recruits going through the academy]."

#### *3.222 Reduction in Proactive Units*

Participants in our supervisor focus groups felt that another factor contributing to the increase in OIS was the recent reorganization of many of the agency's proactive units. Specifically, the supervisors pointed to the drawdown of units like the Neighborhood Enforcement Team (NET) and the Fugitive Apprehension Investigative Detail (FAID) as a potential source of the spike in 2018 OIS. According to the participants, units of this type were effective because they were proactive and would search for some of the most prolific offenders in the jurisdiction. Now, as one participant put it, "We're a reactive department…we're not a proactive [department]" (supervisor quote). Many of the supervisors noted declining arrest numbers as evidence of the negative consequence of reducing the number of proactive units in the agency. One supervisor commented that others are now taking many of the cases that the proactive units would have handled, and doing so with fewer officers. He indicated that this requires prioritization of cases and leaves no time to investigate some violent crimes and offenders. Another supervisor suggested that during the same time PPD was reducing proactive units, it increased community outreach units: "We doubled our community response squad…we have people that will serve ice cream and it's great, but we don't have the numbers to go after violent crime."

These are important concerns raised by the supervisors. Research over the past few decades has clearly demonstrated that proactive and problem-oriented policing strategies are the most effective way to reduce violent crime.[49] [50] Dedicating more attention to prolific offenders and violent groups through evidence-based, proactive strategies can significantly reduce violent crime rates. Moreover, focusing police resources on specific criminogenic places, or "hot spots," has proved to be an effective intervention to violent crime.[51] The focus group participants highlighted that removing Phoenix proactive units inhibits their ability to focus on the most problematic people and places in the jurisdiction. In their view, removing proactive units has increased the frequency of OIS because less proactivity has diminished their ability to take violent offenders off the street before they have the opportunity to become involved in a shooting with an officer: "I truly believe that the impact that we're seeing right now with people being more violent, if we had proactive details still in place that we would not see this spike" (supervisor quote).

#### *3.223 RMS Problems*

Another common theme throughout all our interviews at PPD was that officers dislike the agency's records management system (RMS). This is common in many departments, but the issue in Phoenix was particularly relevant to officers' views on what caused the uptick in 2018 OIS. In short, the inefficiency and cumbersome nature of the RMS unnecessarily takes officers off the street for too long and reduces the time they have to catch violent offenders. This leaves more offenders on the street and increases the opportunity for future OIS. One supervisor gave this example: "…our system is so slow because…do a field interrogation card, which is something we could write out, and we could do the data entry our self in probably two minutes or less [in the past]…that same report now will, if you're adept at it, and you're quick, you're looking at five minutes." The supervisors noted that their RMS is convoluted and requires many clicks and dropdown menus to complete reports. Beyond the time off the street caused by the RMS, the system lacks search capabilities and functionality to aid in investigations and solving cases.

### 3.23 Perceptions of Training and Suggested Improvements

The last issue we discussed in interviews concerned participants' perceptions of the training offered at PPD (e.g., is it good or bad, does it need change) and how training issues may be related to the recent uptick in OIS. It was important to gain insight from Phoenix officers on this issue because community activists, academics, politicians, and police themselves often point to the need for improved training as a potential solution to perceived use of force-related problems.[52] Again, several important themes emerged across the interviews. First, it is important to point out that most interviewees emphasized that the current training is good or, at the very least, has drastically improved in recent years.

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[49] "Reducing firearms violence through directed police patrol," by E.F. McGarrell, S. Chermak, A. Weiss, and J. Wilson, 2001, *Criminology & Public Policy, 1(1)*, 119-148.

[50] "Reducing crime: A companion for police leaders," by J. Ratcliffe, 2018, Routledge.

[51] "The effects of hot spots policing on crime: An updated systematic review and meta-analysis," by A.A. Braga, A.V. Papachristos, and D.M. Hureau, 2014, *Justice Quarterly, 31(4)*, 633-663.

[52] "Police officers as warrior or guardians: Empirical reality of intriguing rhetoric?," by K. McLean, S.E. Wolfe, J. Rojek, G.A. Alpert, and M. Smith, 2019, *Justice Quarterly.* Advance online publication.

An officer that had been involved in a shooting suggested that "We're pretty well trained…I will tell you today's police officer is far better trained, far more capable than when we came on…they do more and they do it better…the training they get is relevant, it's timely, it's well structured." A PSB investigator echoed this sentiment in this way: "To be quite frank, we're in a much better position right now as far as training…they're getting more training, we're paying attention to the quarterly shoots, we've re-arranged the academy personnel and put a commander back down there." Officers in each of the focus groups agreed that recent changes to the academy training (e.g., going to squad-based training and greater focus on reality-based scenarios) were welcomed improvements.

#### *3.231 Hesitation and Lack of Appropriate Mindset*

At the same time, many officers did not shy away from offering critiques. A common point of discussion was that many of the participants believe that newer officers are more hesitant. There were several reasons why they believed this new trend has occurred. For starters, many of the supervisors and OIS-involved officers expressed concern that PPD officers are more hesitant because they are afraid of losing their jobs. Focus group participants noted that the increased scrutiny of police in recent years and increased frequency with which their actions are being recorded have caused many officers to hesitate while on the job out of fear that they will be fired. Several of the supervisors noted witnessing this hesitation from their officers: "They're afraid they're going to get in trouble" and "I think sometimes they kind of throttle it [back] a little bit to make sure they don't get in trouble." One officer with previous OIS experience reiterated this point by arguing that "People are going to hesitate because they're scared…not [of] being killed…they're scared of losing their paychecks that pay for their kid's food and clothing…that's what they're terrified of."

From the participants' perspectives, this is problematic because it causes officers to hesitate to act which, in turn, causes more OIS because hesitation allows situations to escalate beyond officers' control. One supervisor spoke about the newer officers and argued that "they don't want put hands on people, they don't want to just get somebody in handcuffs, so they don't become a problem." The officers involved in past shootings also felt this way. One described a common interaction he has witnessed by new, hesitant officers: "Dude's [suspect] kind of like raring up getting ready to go, instead of grabbing his [officer] taser and grabbing a hold of the dude and putting him on the ground, putting on cuffs, they're [hesitant officers] letting that dude build this confidence up to escalate that anger against us." Less hesitation early in encounters, according to participants, would lead to less escalation and fewer OIS.

Many of our focus group officers expressed concern that new officers' training and socialization in the academy is one of the sources of this problem. Many participants believed that the academy has become too "soft" and is not creating officers with the "right mind set." One supervisor argued that the academy is not preaching to officers that "…every time you put a uniform on, it is your life that you're fighting for every day out there." Furthermore, several participants in each focus group noted that new officers are less willing to go hands-on with a subject and are over-reliant on conducted energy devices (CED; e.g., Tasers). In their view, this is caused by lack of sufficient training in the academy. One supervisor put it this way:

> *"I do think we could improve our training. I think we need to take a harder look at what's going on in the academy because I don't think we're preparing these young kids for the realities of the true evil that we see out here. Because, they don't want to address it because it's scary. But there's an evil that cops see on the street and they need to be ready for it, and I don't think these young kids are truly ready for the evil that they might encounter and when they do encounter it, or when it's time to go hands on, they're questioning oh my god, I'm going get in trouble."*

Again, the problem with such hesitation and lack of preparedness is that more situations are allowed to escalate to an OIS: "A lot of situations that end in shootings are very much driven by that initial contact, and I think, sometimes coming on strong and coming on as the authority and putting it to bed prevents it from getting worse because it essentially interrupts that person's thought process" (supervisor quote). Another supervisor argued that because of the training academy's focus in recent years "I think we're spending a lot of time considering options instead of just jumping to the fight." Many of the supervisors believed this problem can be traced back to the fact that the "…academy is softening

our people up…and then when they get to it [the street], they're behind the ball, and then it does go to guns." Lack of proper fighting skills and mindset development was pinpointed by many participants as the cause of the uptick in OIS.

*3.232 Training Changes*

Based on our findings from the previous sections, we asked focus group participants what changes they would make to academy or in-service training at the PPD. The general agreement within the supervisor and OIS-experienced officer focus groups was that reality-based scenario training was the best form of training during the academy and in-service. One supervisor's sentiment on this issue also was held by other interviewees:

> *"I don't think we should lower the amount of time we're spending on marksmanship, but that decision-making [training] should be upped. I think we should have some training more often where the solution isn't always a shoot but there's real consequence where you're going to get hit with a simunition [simulated ammunition] or you're going to get punched in the face, or something could potentially happen."*

Some participants were less supportive of such training: "every time we do reality based or simulation type training…I always end up leaving thinking that wasn't all that realistic even though I say that's the best training we get" (OIS-experienced officer quote).

Other interviewees noted that virtual reality scenario training is a great option and sometimes more realistic than reality-based scenarios in PPD's Tactical Village. For example, the VirTra training simulator was mentioned by several interviewees as highly realistic because it allows trainees and trainers to guide the scenario in many possible directions. Reality-based scenarios are often too limited in the number of options available regarding outcomes. According to participants, VirTra is valuable because it allows for communication skill practice while also having simulated life-threatening situations. Such issues combined with officers wearing voltage shot simulation packs (packs that shock officers if they are shot during the scenario) improve the reality of scenarios by increasing officers' stress levels. Whether through reality-based or virtual reality training, most focus group participants noted that the training academy (for new recruits and in-service) could benefit from dedicating more time on decision-making scenarios with multiple outcome options that simulate real-world stress levels.

Regarding academy training of new recruits, participants offered several other suggestions for improvement. First, several of the supervisors argued that the academy "field problems training" section (reality-based scenarios during recruit training) lacks accountability. They suggested that it is difficult to fail this portion of the academy, yet many new officers are behaving in inappropriate ways during the scenarios. Increasing the accountability associated with training of this type, according to the supervisors, would improve new recruits' preparedness for the street. Second, and relating back to the problems with officer hesitation, several of the supervisors suggested that the academy focus more effort on building new officers' confidence and command presence. In discussing this issue as it relates to the recent increase in OIS, one supervisor said, "I think it's a confidence issue mostly, because I see with some of them [newer officers], they might jump the wall after him [suspect], but they're not mentally prepared to deal with this guy toe to toe until backup shows up." Building on this point, another interviewee suggested that small issues while walking up to a call can be problematic in the long run. He noted that many new officers walk up to calls not aware of "…their surroundings, they're looking at the ground, or, you know, just slumped in posture" (supervisor quote). Participants indicated that confidence building and command presence classes in the academy could help solve this problem and potentially reduce the number of OIS over time. According to the officers, effective communication skills are key: "You gotta be able to communicate effectively…you have to be able to have some level of command presence."

Another problem with respect to training, according to some of the supervisors, is that the current FTO program is weak. Because it is "…a lot of work" (supervisor quote), the agency has trouble getting officers to be FTOs. This caused the agency to "recently drop the standard to only two years on as a police officer…two years on as a police officer to train somebody else" (supervisor quote).

Finally, it is important to note that many of the officers with past OIS experience expressed reservation that any level of training could impact use of force-related outcomes. For example, one officer argued:

> *"Training isn't going to fix the problem [OIS]. And why that is, is this – the brand-new officer has the most recent training, and has had the most of it. He's got almost 1,500 hours of training before he or she hits the street. And he's on probation for this first year. So that guy's had the most recent training, the most current training, but he's probably the least able and the least skillful officer. Because what makes the difference is not just the training, it's the experience…Because training is pretty vague, we cannot offer training that covers a thousand use of force scenarios. Because, you switch one variable it changes a shoot to a no-shoot or vice versa. So, training being broad, and I think this is why experience matters more, is because it's the processing of the information."*

Several of the officers expressed the opinion that training is too vague to have a demonstrable impact on use of force decision-making and that experience on the street is what matters more from a "training" standpoint. This view is not particular to PPD officers. Law enforcement officers around the country have often been resistant to training based on similar opinions.[53] [54] This suggests that improvements need to be made regarding how agencies work to balance officer expectations about what training can and cannot accomplish, and that departments should better incorporate into training to improve buy-in.

### 3.24 Summary

The focus group interviews provided nuanced insight into PPD supervisors', OIS experienced officers', and PSB investigators' opinions concerning the causes of the increase in OIS. In summary, participants believed that understanding the uptick in OIS is complex and can be explained by many potential factors such as the following.

- New threats posed to officers such as:
  - Subjects with mental health and/or substance use disorder problems
  - Community members being more willing to challenge police authority
  - More subjects willing to be violent toward and use weapons against the police
- PPD has an insufficient number of officers to handle the crime problems it faces
- Reduction of proactive policing units has inhibited officers' ability to apprehend prolific and violent offenders before they can become involved in a shooting with an officer
- Inefficient records management system
- Hesitation and lack of appropriate mindset among newer officers
- More training focused on decision-making and utilizing virtual reality and scenario-based exercises is needed
- Officers need to experience more confidence and command presence training

[53] "Learning the skills of policing," by D.H. Bayley, and E. Bittner, 1984, Law and Contemporary Problems, 47(4), 35-59.
[54] "Why reforms fail," by W.G. Skogan, 2008, Policing & Society, 18(1), 23-34.

## 4. Characteristics of 2018 OIS Relative to Years Past

The first section of this Study has demonstrated the well-known increase in OIS events in the PPD in 2018, which naturally begs of the question of what has contributed to this increase. The second section offered community and officer perspectives on why this increase has occurred. The following two sections of this report draw on different sources of data to examine if distinctive patterns can be identified in the 2018 OIS events. In this third section, we examine the circumstances of OIS incidents in 2018, relative to years past. In some cases, this involves an examination of data dating back to 2009. In others, due to reasons beyond our control (e.g., changes in data recording systems and/or processes), we can only look back as far as 2013 or 2016. The intent of this analysis is to assess whether something unique is present in the characteristics of 2018 OIS events relative to prior years, which may identify contributing factors to this increase.

### 4.1 OIS Incident Characteristics

Figure 13 provides a quarterly breakdown of PPD OIS in 2018 relative to OIS from 2009 to 2017. From 2009-17, most OIS (29.7%) occurred during the third quarter (i.e., July – September), whereas in 2018, most OIS (36.4%) occurred during the second quarter (i.e., April – June). On average, from 2009-17, there were 5.0 OIS in the first quarter, 5.4 in the second quarter, 6.1 in the third quarter, and four in the fourth quarter of each year. In 2018, these totals were 12, 16, 10, and six, respectively. However, the differences between the quarterly breakdowns for these two periods were not statistically significant (Pearson $\chi^2 = 2.62$, $p = .45$). In other words, these differences are not any larger than might be expected to occur purely by chance.

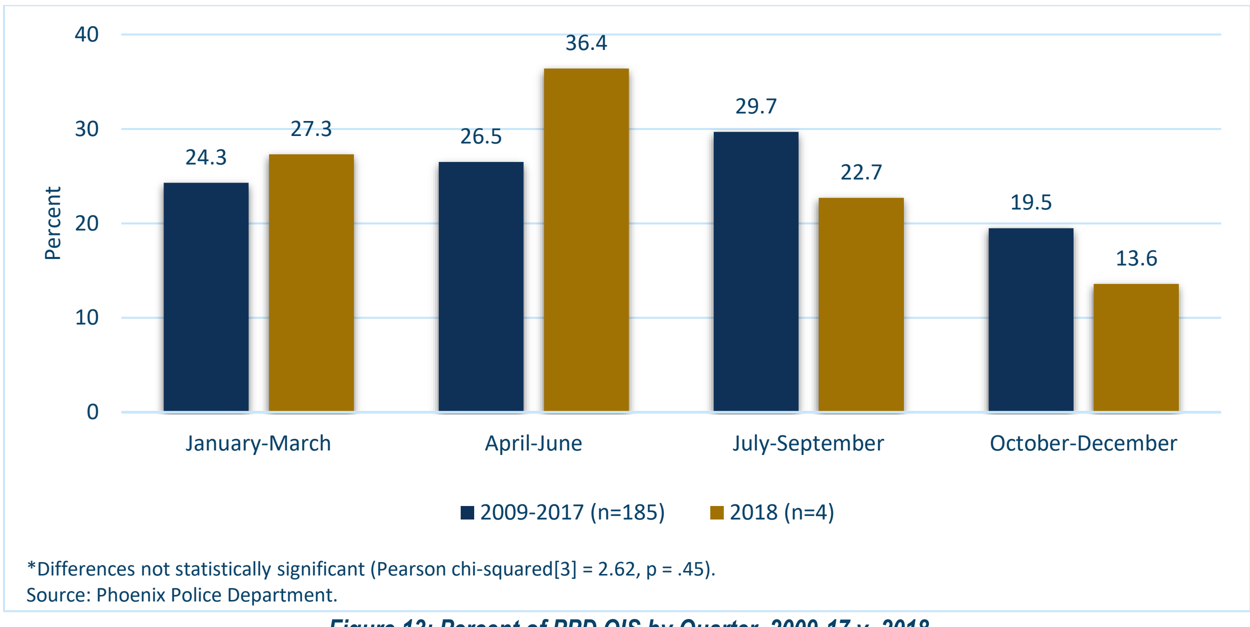



***Figure 13: Percent of PPD OIS by Quarter, 2009-17 v. 2018***

Figure 14 displays a monthly breakdown of PPD OIS in 2018 relative to OIS from 2009 to 2017. Perhaps the most notable difference between the two periods is September and October. From 2009-17, nearly 17% of all OIS occurred in September or October, but in 2018, only about 5% of all OIS occurred in those months. Yet again, the differences between the monthly breakdowns for these two periods were not statistically significant (Pearson $\chi^2 = 9.32$, $p = .59$).

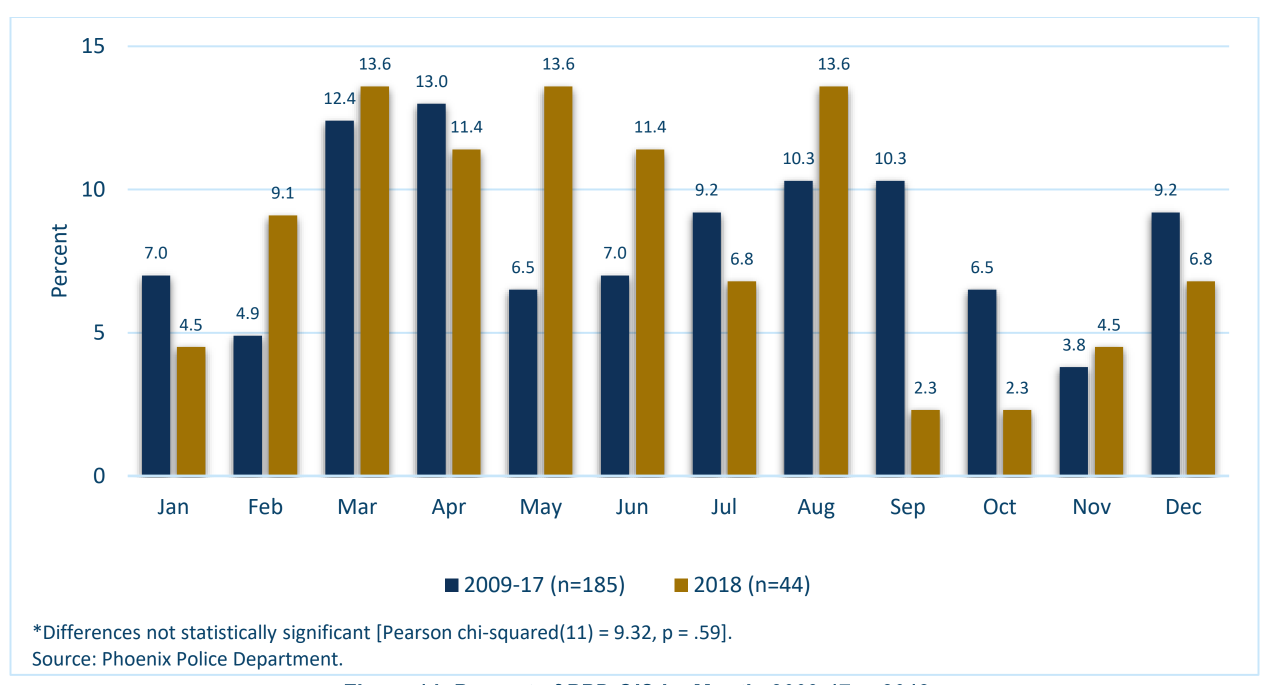



***Figure 14: Percent of PPD OIS by Month, 2009-17 v. 2018***

Figure 15 shows the number of days that transpired between OIS incidents from 2009-17 and in 2018. Across both periods, this number ranged from a low of zero to a high of 81. From 2009-17, about 58% of all OIS were followed by another OIS within 15 days. In 2018, due to the sheer number of OIS that occurred, approximately 86% of OIS were followed by another OIS within 15 days. The difference between the two periods, in terms of the average number of days between OIS incidents, was significantly significant ($t = 3.45$, $p < .001$).

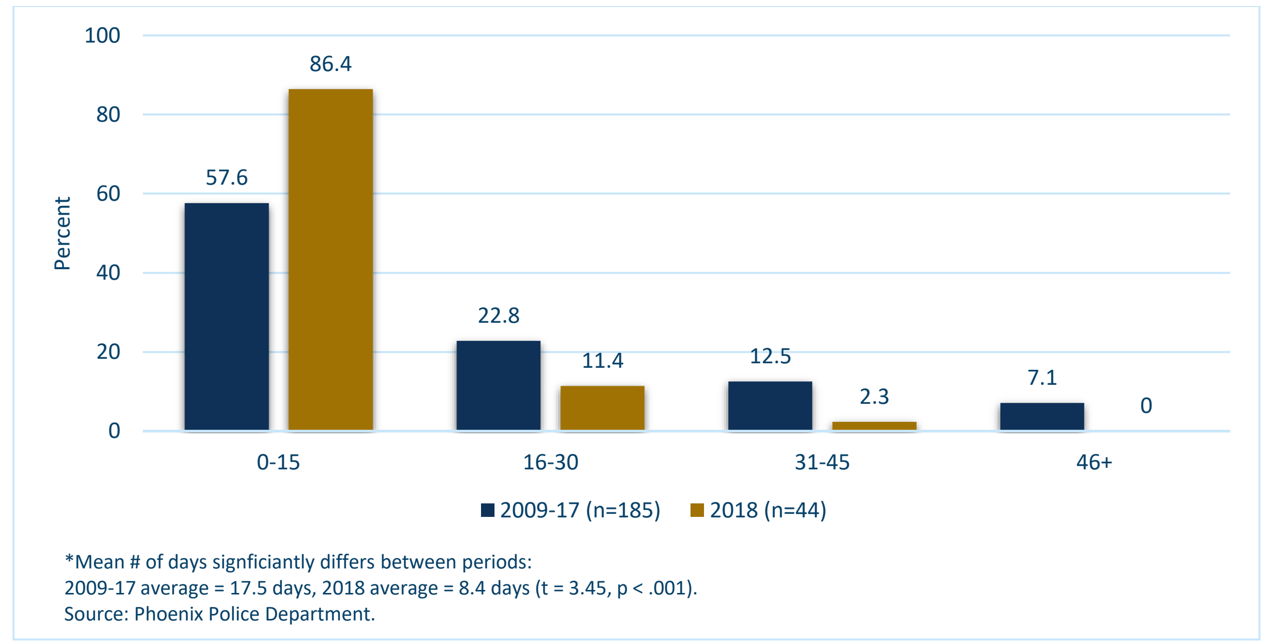



***Figure 15: Days between PPD OIS Incidents, 2009-17 v. 2018***

With Figure 16, we considered what time of day the PPD OIS took place. Nearly 39% of the 44 OIS in 2018 occurred between 7:01AM and 3:00PM, while only 27% of OIS from 2009-17 occurred between these hours. Only 20.5% of

2018 OIS occurred between 11:01PM and 7:00AM, compared to 33.5% of 2013-17 OIS. However, these differences were not statistically significant (Pearson $\chi^2 = 3.61$, $p = .16$).

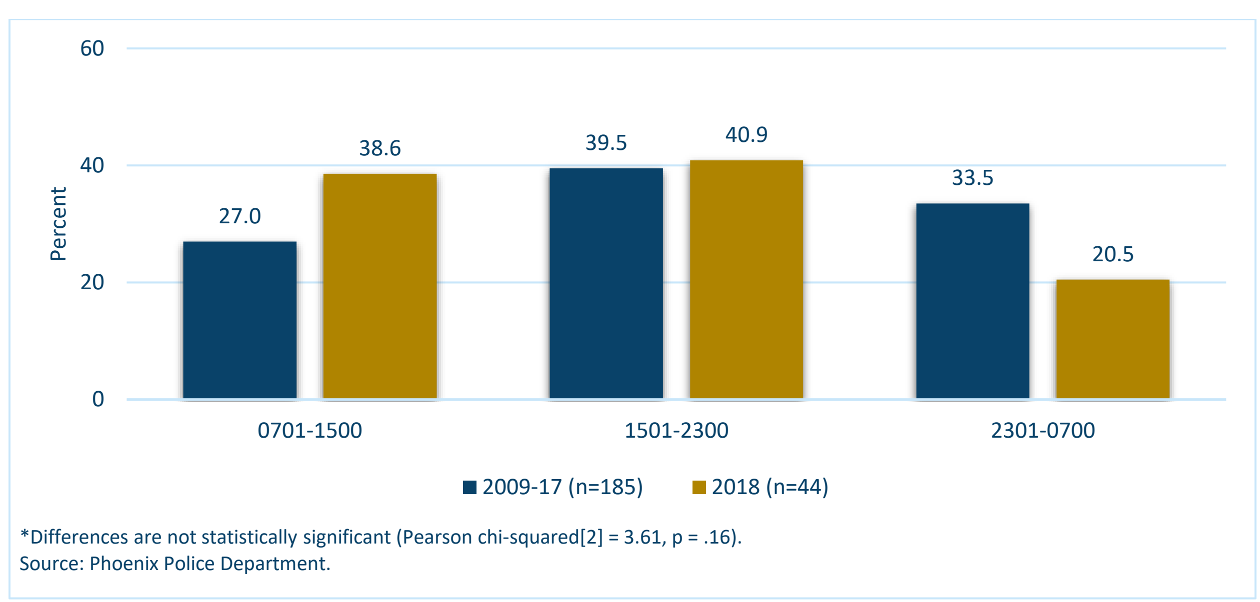



***Figure 16: Time of Day of PPD OIS Incidents 2009-17 v. 2018***

Figure 17 provides a breakdown of the nature of the police-community interaction that resulted in PPD OIS from 2013-17 and 2018. Among OIS in both periods, the most common "initial contacts" by far were community calls for service (roughly 64% and 68% respectively). Investigations (10% and 9% respectively) and traffic stops (10% and 11%, respectively) were the next most common initial contacts of OIS. Notably, none of the 2018 OIS fell into the "self-initiated" category, while eight OIS (or 7%) from 2013-17 did. Nevertheless, the differences between the two periods, in terms of the distribution of initial contacts, was not statistically significant (Pearson $\chi^2 = 8.01$, $p = .43$)

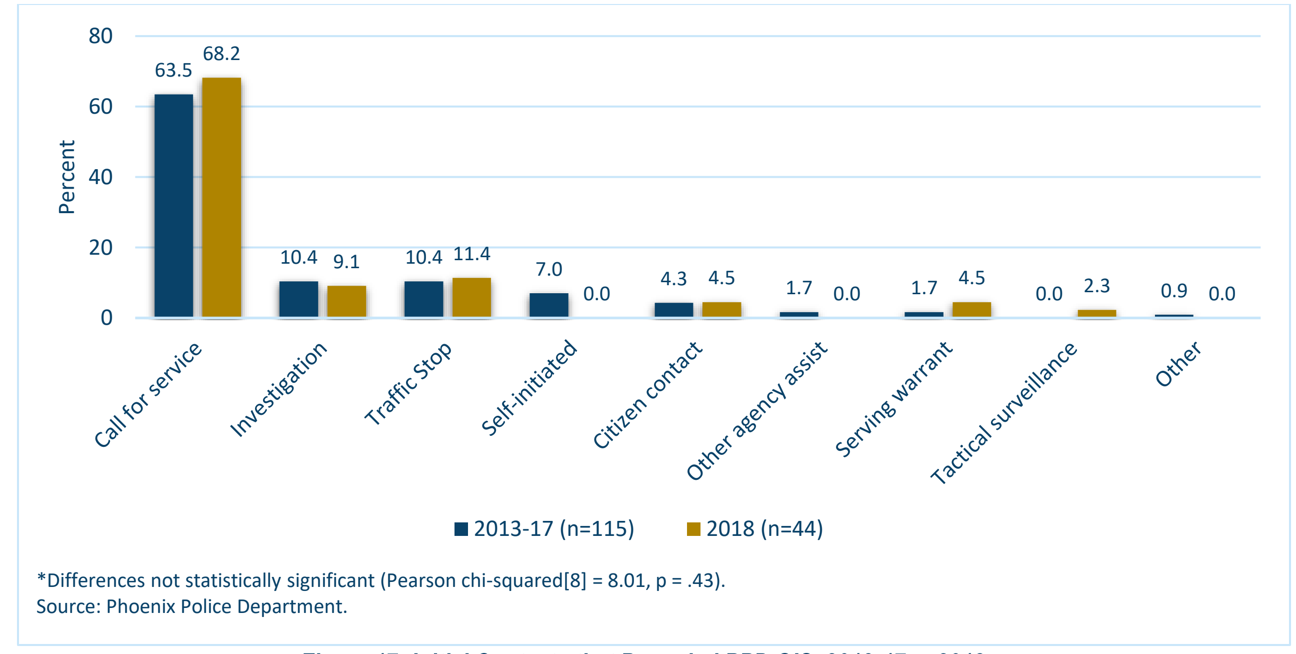



***Figure 17: Initial Contacts that Preceded PPD OIS, 2013-17 v. 2018***

Figure 18 displays the priority of the initial radio call that ultimately resulted in an OIS from 2013-17 and in 2018. Priority 1 calls refer to crimes in progress or crimes that had just occurred. From 2013-17, roughly 45% of OIS followed from a Priority 1 radio call, versus 55% in 2018. Priority 2 calls involve urgent, but non-emergency, situations. From 2013-17, 20% of OIS followed from a Priority 2 radio call, versus roughly 14% in 2018. In many cases, OIS resulted from police-community interactions that were not prompted by a radio call – these were labeled "not applicable" (roughly 35% in 2013-17 and 32% in 2018). The differences between the two periods, in terms of the priority of initial radio call, are barely noticeable and not statistically significant (Pearson $\chi^2 = 1.37$, $p = .51$).

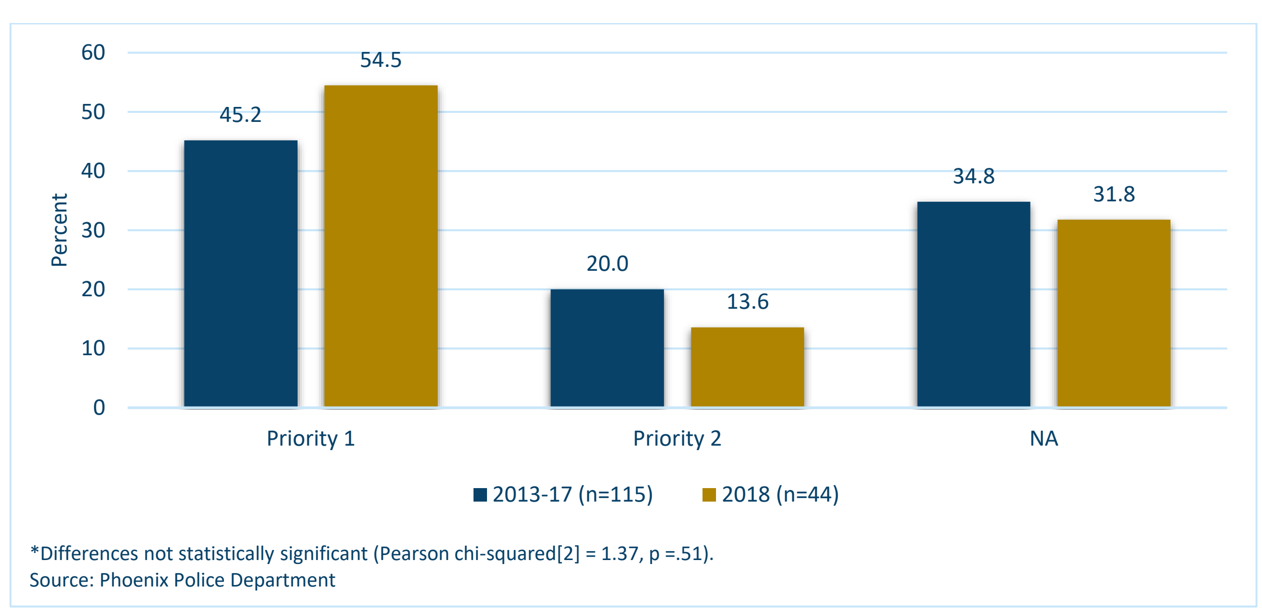



***Figure 18: Priority of Initial Radio Call, 2013-17 v. 2018***

Figure 19 provides a breakdown of the factors that contributed to PPD OIS from 2013-17 and in 2018. These data are recorded in a "check all that apply" fashion, and as such, categories are not mutually exclusive. In other words, the percentages for each period will exceed 100% since one OIS could have multiple contributing factors. For the most part, the factors contributing to OIS from 2013-17 resemble those contributing to OIS in 2018. In both periods, aggravated assaults/homicides were the leading factors contributing to OIS (87% from 2013-17 and 93% in 2018). The only contributing factor that significantly differed across the two periods was "pursuit related." Pursuits (including by vehicle and on foot) contributed to nearly 29% of OIS from 2013-17, versus just 11.4% of OIS in 2018. This difference was statistically significant ($t = 2.32$, $p < .05$). This trend is also reflected in an analysis of OIS incidents of almost 50 member agencies of Major Cities Chiefs Association (MCCA). This data finds that OIS incidents involved vehicle and/or foot pursuits an average of 32% from 2014 – 2017, and that 2018 incidents involved pursuits 23% of the time.[55]

[55] As analyzed from data taken from the National Police Foundation/Major Cities Chiefs Association Officer Involved Shooting Database, 2019.

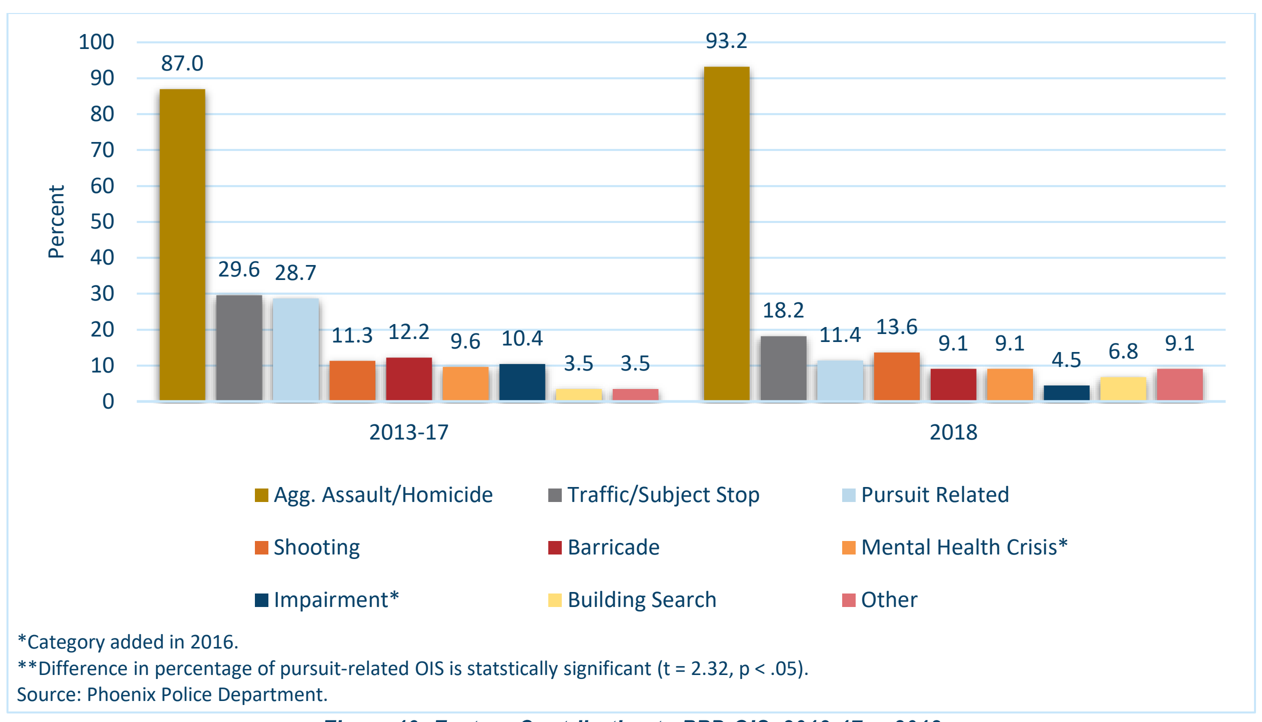



***Figure 19: Factors Contributing to PPD OIS, 2013-17 v. 2018***

For each OIS, we calculated the time (in minutes) from the officers' arrival on scene to the moment each OIS occurred. From 2013-17, this time ranged from less than one minute to 664 minutes (approximately 11 hours). In 2018, it ranged from less than one minute to 415 minutes (approximately seven hours). Note, however, that the difference between the two periods, in terms of the mean number of minutes that passed from arrival time to OIS time was not statistically significant ($t = 0.47$, $p = .64$). As Figure 20 demonstrates, over 40% of OIS in both periods occurred within five minutes of officers' arrival on scene. Yet, many OIS in both periods did not occur until an hour or more after officers' arrival on scene (roughly 18% from 2013-17 and 23% in 2018).

We also calculated the time (in minutes) from when officers made contact with the subject(s) to the moment each OIS occurred. From 2013-17, this time ranged from less than one minute to 664 minutes (approximately 11 hours). In 2018, it ranged from less than one minute to 415 minutes (approximately seven hours). The difference between the two periods, in terms of the mean number of minutes that passed from contact time to OIS time, was not statistically significant ($t = 0.04$, $p = .97$). Figures 20 and 21 provide a breakdown of contact time to OIS time for each period. For both periods, half of all OIS occurred within one minute of the time at which officers made contact with the subject.

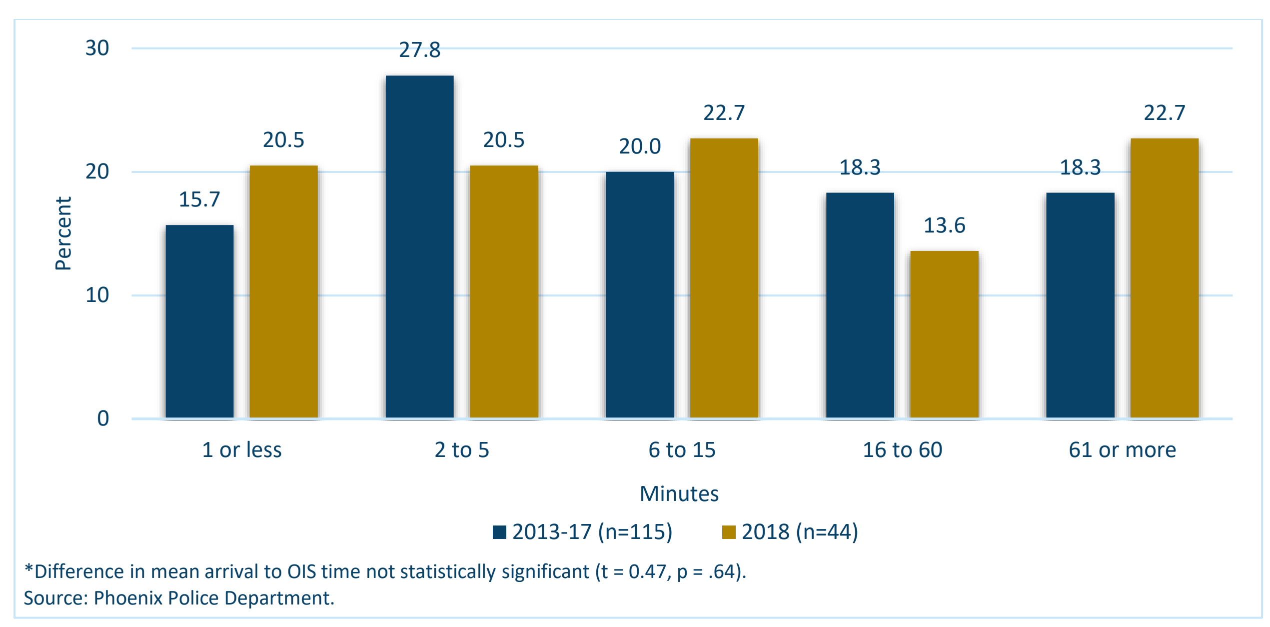



***Figure 20: PPD Officer Arrival Time to OIS (in minutes) 2013-17 v. 2018***

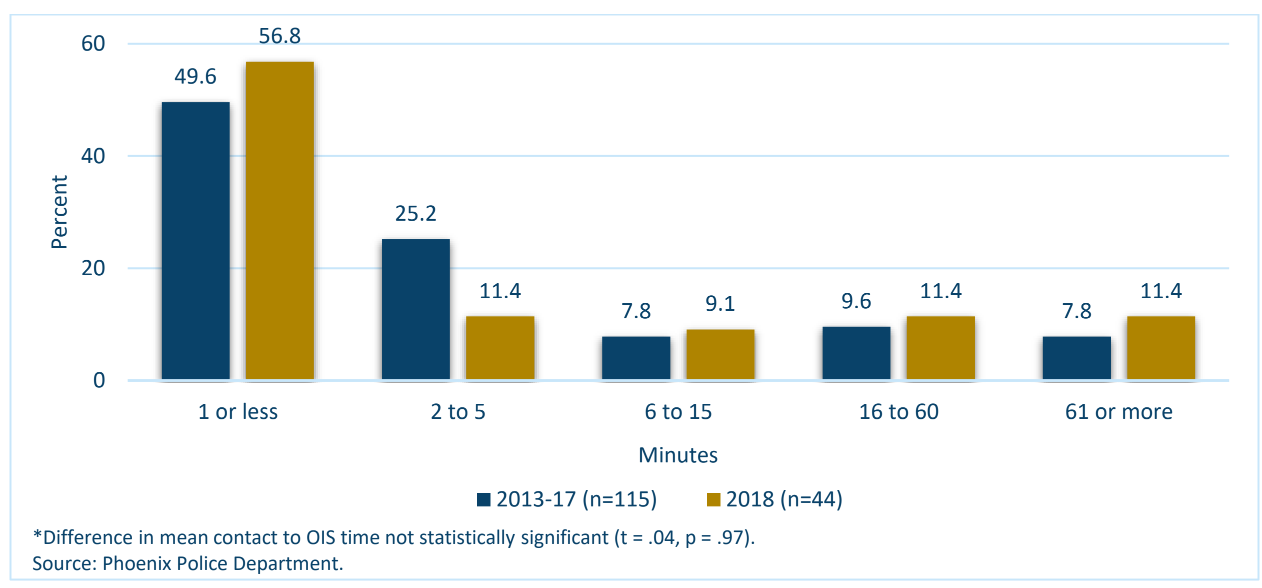



***Figure 21: Contact Time to OIS Time (in minutes), 2013-17 v. 2018***

Next, we reviewed the status of the supervisor at the time of each OIS, which included *on scene, monitoring, responding, unavailable, not applicable,* or *undetermined.* Figure 22 indicates that for 40% of the PPD OIS that occurred from 2013-17, the supervisor was on scene. In 2018, the supervisor was on scene for approximately 39% of all OIS. The differences between the two periods, in terms of supervisor status at the time of OIS, were not statistically significant (Pearson $\chi^2 = 3.19$, $p = .67$).

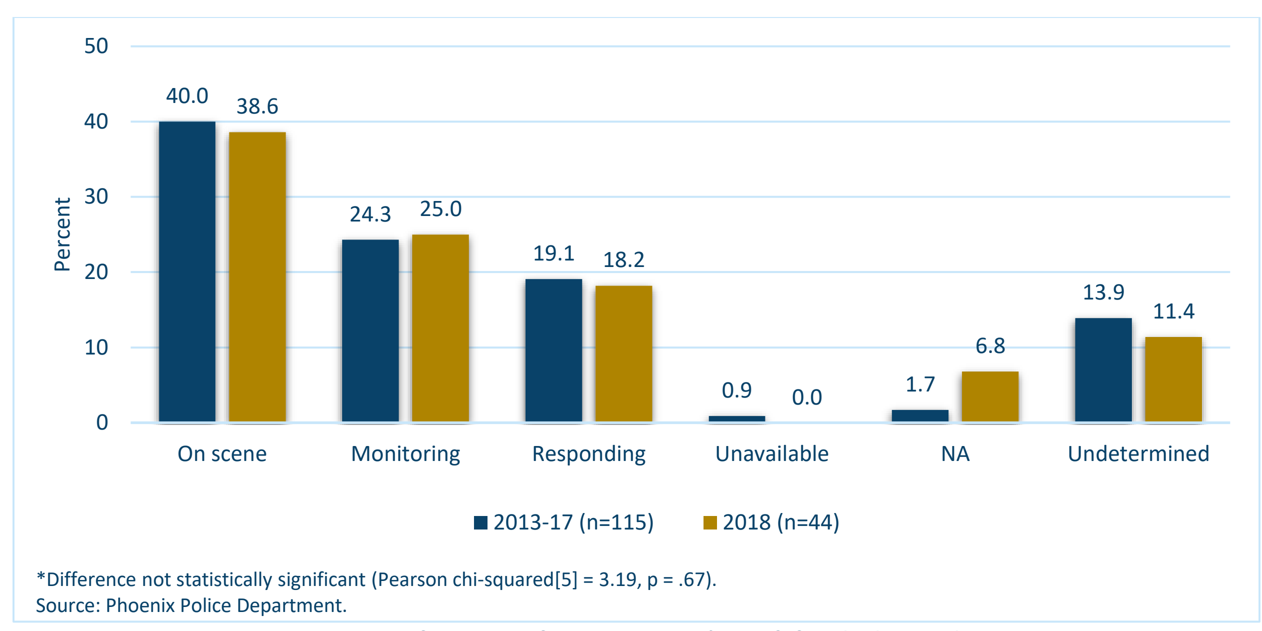



***Figure 22: Supervisor Status at Time of PPD OIS 2013-17 v. 2018***

Figure 23 displays the setting of each PPD OIS from 2013-17 and in 2018. In both periods, over half of all OIS took place outdoors. Another 17-20% took place either indoors or across mixed settings. Finally, from 2013-17, about 28% of all OIS were vehicle related, compared to about 18% of OIS in 2018. These differences were not statistically significant (Pearson $\chi^2$ = 1.64, p = .65).

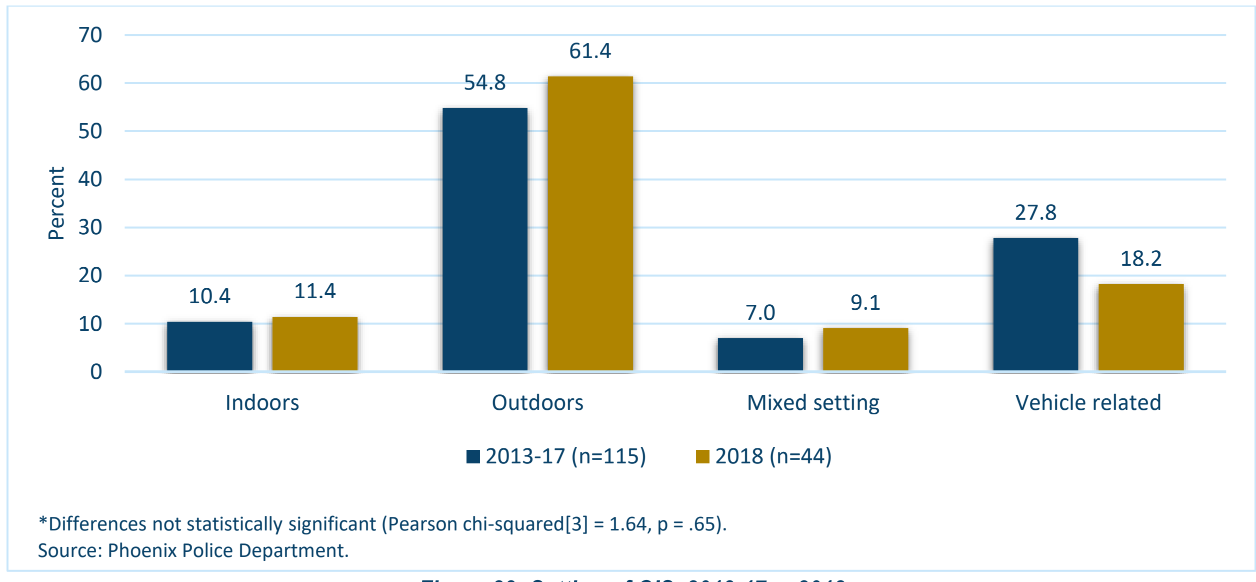



***Figure 23: Setting of OIS, 2013-17 v. 2018***

## 4.2 Officer Characteristics

Next, we considered the number of officers who were actively engaged in each OIS from 2013-17 and in 2018. *Actively engaged* refers to officers who were on-scene and in close enough proximity to have been involved in the OIS. From 2013-17, the number of officers engaged in OIS ranged from one to 16, with a mean of 2.8 and median of two. In 2018, the number of officers engaged in OIS ranged from one to 13, with a mean of 2.43 and median of two. The difference between the two periods, in terms of the mean number of officers engaged in OIS, was not statistically significant (t = .88, p = .38). However, it is noteworthy that whereas only about 26% of OIS from 2013-17 involved a single engaged

officer, nearly 41% of OIS in 2018 involved a single engaged officer. Recall that several of our focus group participants suggested that insufficient numbers of officers in the jurisdiction may be a contributing factor to the increase in OIS. As others have noted, one potential way to reduce OIS is to encourage lone officers to avoid rushing into situations they might have to "shoot their way out of,"[56] when they can reasonably wait for backup to arrive [57] (e.g., when there is no imminent threat to the officer or other community members – such as a barricade situation). We observed that in 2018, there were five OIS involving a single engaged officer wherein the officer did not shoot until at least 15 minutes after his/her arrival on scene. These incidents involved arrival to OIS times of 16, 24, 49, 107, and 122 minutes, respectively. However, three additional considerations should be made before drawing conclusions about these incidents. First, waiting for backup is not always plausible as officers may need to interact immediately in order to reduce harm to others. Second, simply because an OIS involved a single officer, it does not necessarily mean waiting for backup to arrive before engaging would have prevented the OIS. Lastly, some incidents may be mundane enough initially that backup does not seem critical but might quickly escalate and require an officer to use deadly force to prevent harm.

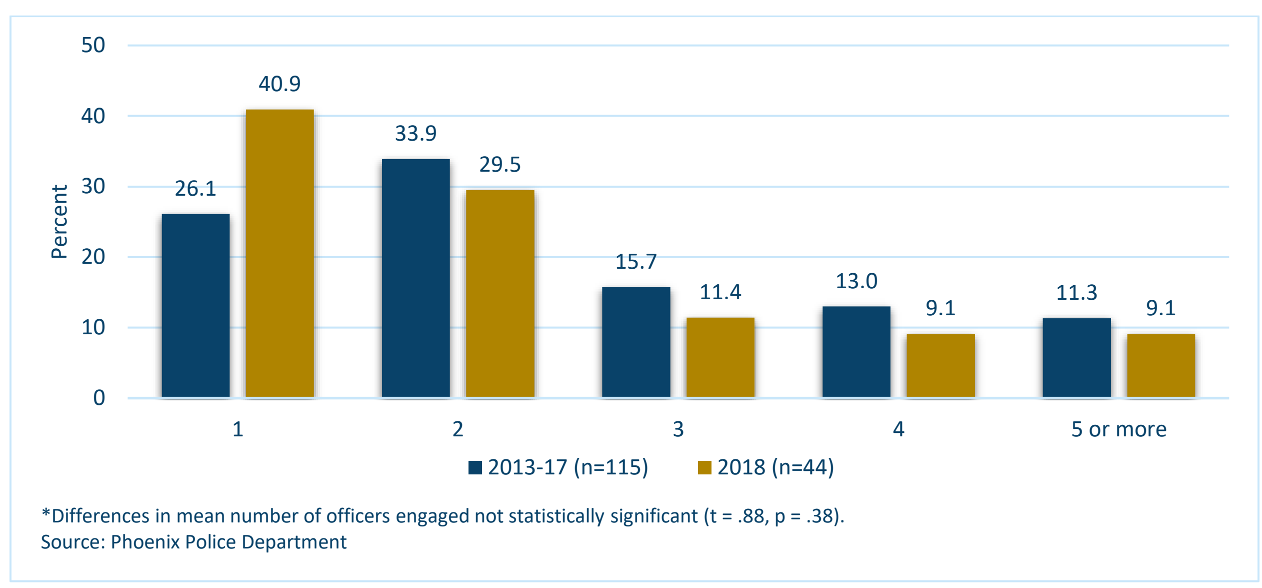



***Figure 24: Number of Officers Actively Engaged in PPD OIS, 2013-17 v. 2018***

We also considered the number of officers who fired their weapons during OIS from 2013-17 and in 2018. For both periods, the number of officers who fired their weapons ranged from one to five with a mean of about 1.6 (median = 1). As Figure 25 shows, approximately two-thirds of OIS in 2013-17, as well as in 2018, involved just one officer firing his/her weapon. The differences between the two periods were not statistically significant ($t = 0.37$, $p = .71$).

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[56] "Critical assessment of an analysis of a journalistic compendium of citizens killed by police gunfire," by D.A. Klinger, and L.A. Slocum, 2017, *Criminology & Public Policy*, 16(1), 349-362.
[57] "When police kill," by F. Zimring, 2017, Harvard University Press.

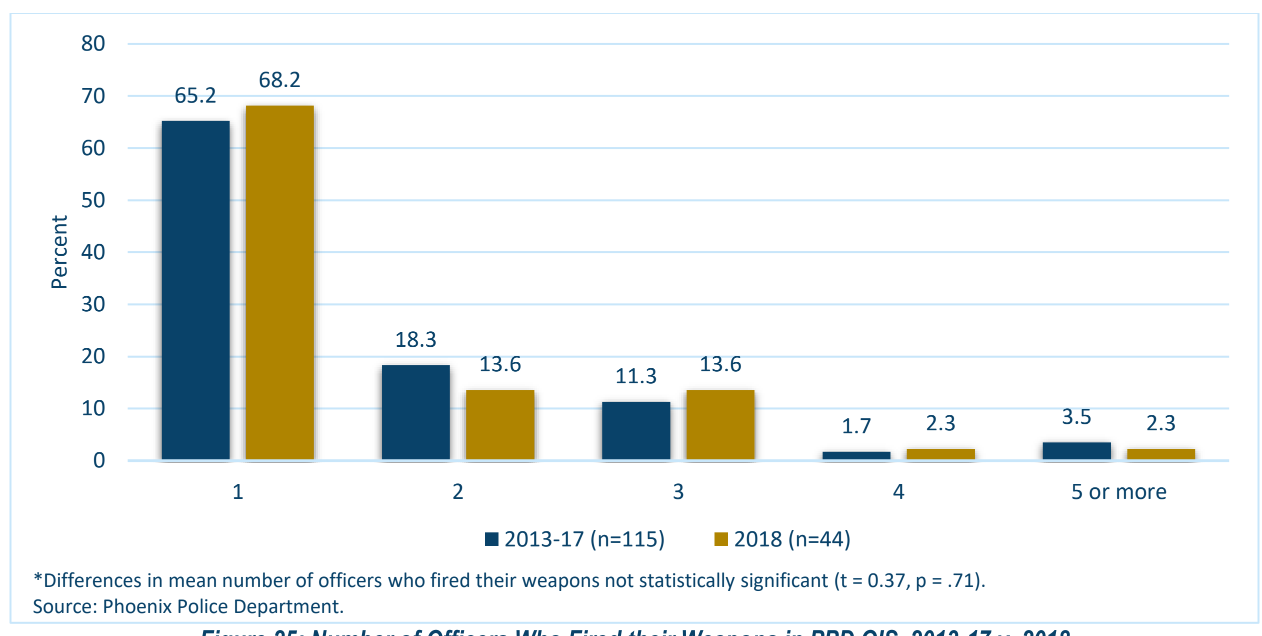



***Figure 25: Number of Officers Who Fired their Weapons in PPD OIS, 2013-17 v. 2018***

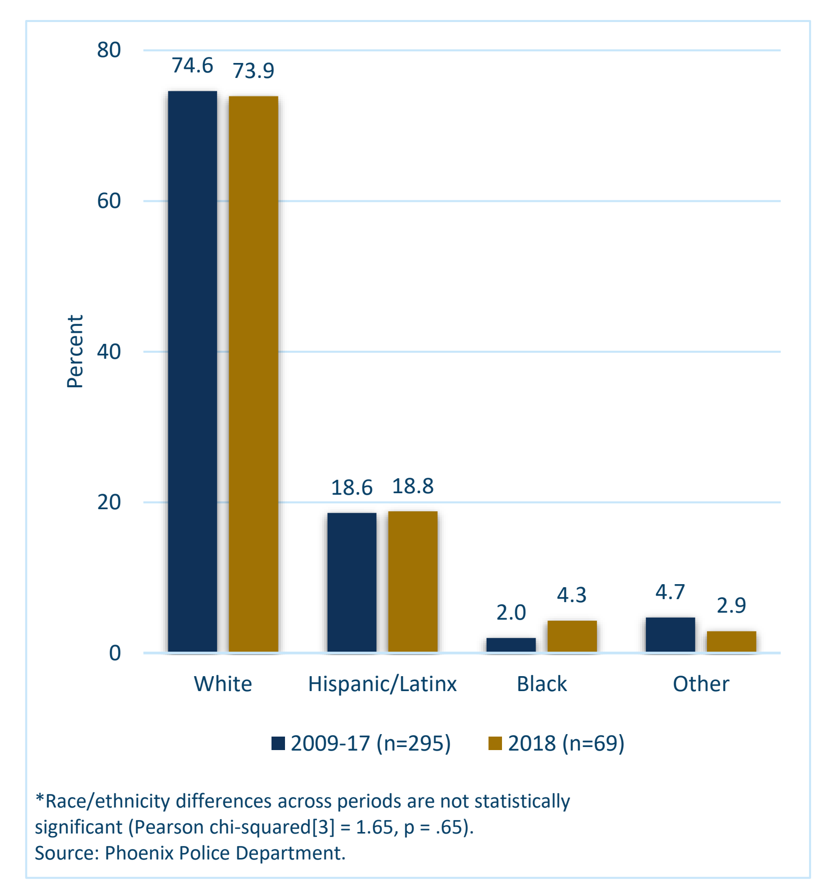



***Figure 26: Race/Ethnicity of Officers Involved in PPD OIS, 2009-17 v. 2018***

Figures 26 and 27 display the racial/ethnic and gender breakdown of officers involved in OIS from 2009-17 versus 2018. In terms of race/ethnicity, roughly three out of every four officers involved in OIS in both periods were white. Another nearly 19% of officers involved in OIS in both periods identified as Hispanic/Latino, and the remaining 7-8% in each period identified as black or some other race. The differences between each period, in terms of the racial/ethnic breakdown of officers, were not statistically significant (Pearson $\chi^2$ = 1.65, p = .65). Furthermore, the racial breakdown of officers involved in OIS closely resembles that of PPD as a whole. As of October 2018, the racial breakdown of PPD was as follows: 74% white, 19% Hispanic/Latino, 4% black, and 3% other. These percentages have fluctuated over the study period, but only slightly. Thus, no one particular racial/ethnic group was significantly over- or underrepresented in OIS from 2009-17 or in 2018.

The majority of PPD officers involved in OIS from 2009-17 and in 2018 were males (see Figure 27). From 2009-17, six out of 295 (or 2%) officers involved in OIS were females. In 2018, five out of 62 (or 7%) officers involved in OIS were

females. The difference between the two periods, in terms of the gender breakdown of officers involved in OIS, was statistically significant ($t = 2.29$, $p = .02$). However, women have comprised roughly 13% of PPD's sworn personnel each year dating back to 2009, so it does appear on the surface that female PPD officers are less likely to be involved in OIS. Yet, in order to draw more firm conclusions, we would need more detailed data about the assignments and locations in which female PPD officers work. It is possible that female officers make up the percentage of officers involved in OIS that we might expect based on their representation in patrol or in areas of the city that experience more violence or higher call volumes.

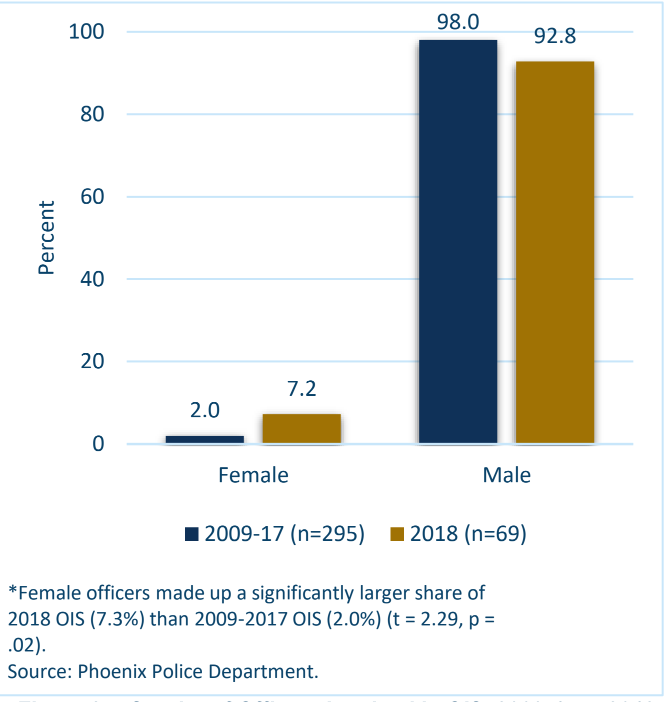



***Figure 27: Gender of Officers Involved in OIS, 2009-17 v. 2018***

Next, we considered the job tenure, in terms of years with PPD[58], of each of the officers involved in OIS from 2009-17 and in 2018. From 2009-17, OIS officers' tenure ranged from less than one year to 29 years. In 2018, OIS officers' tenure ranged from less than one year to 32 years. The difference between the means across the two was not statistically significant ($t = -1.11$, $p = .27$). Figure 28 breaks the tenure distribution into five-year increments for each period. When broken up into increments this way, the difference between the two periods is statistically significant (Pearson $\chi^2 = 22.85$, $p < .001$). The most striking difference is among officers with five to nine years employed with PPD. From 2009-17, 35% of officers involved in shootings fell into this group, versus 10% of officers involved in OIS in 2018. This is potentially due to a multi-year hiring freeze that occurred from January 2009 to March 2015, so that in 2018, there were simply fewer officers employed by PPD with five to nine years of experience, relative to years past. Another issue to point out is that a vast majority of OIS in 2018 involved veteran officers. Nearly 63% of these officers had 10 or more years of experience with PPD. This runs counter to some of the focus group members' arguments that suggested the 2018 spike in OIS is due to younger officers being ill-prepared or hesitant. At the same time, however, PPD did see an increase in the percentage of OIS with officers with less than five years of experience (17.7% in 2009-17; 24.6% in 2018). So, at least in terms of tenure, the 2018 OIS were not constrained to less experienced officers, but they did account for a meaningful portion of the incidents.

[58] Tenure data was provided by PPD and did not indicate whether an officer had previously worked for another agency.

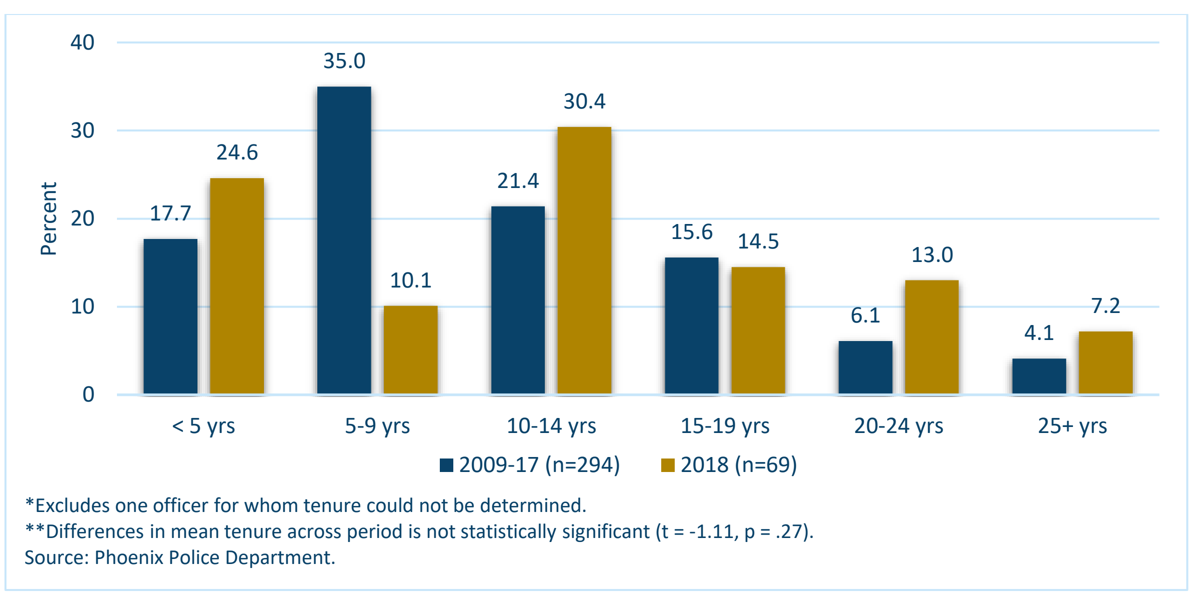



***Figure 28: Tenure of OIS Officers, 2009-17 v. 2018***

We also considered the age of officers involved in OIS from 2009-17 and in 2018. From 2009-17, the age of PPD officers involved in OIS ranged from 22 to 62. In 2018, the age of officers involved in OIS ranged from 21 to 60. The difference between the means of the two periods was not statistically significant (t = -0.63, p = .53). Figure 29 breaks age into four categories: 20-29, 30-39, 40-49, and 50 or older. From 2009-17, as well as in 2018, most officers involved in PPD OIS were in their 30s. The difference between the two periods was not statistically significant (Pearson $\chi^2$ = 1.37, p = .71).

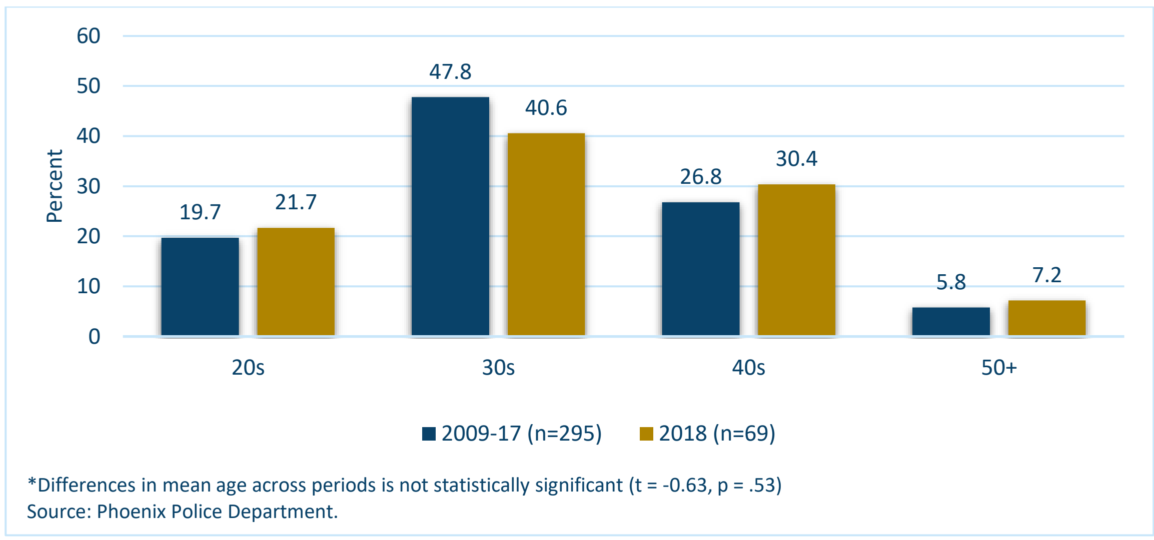



***Figure 29: Age of PPD Officers Involved in OIS, 2009-17 v. 2018***

Figures 30 and 31 display the rank and duty assignment of PPD officers involved in OIS from 2009-17 and in 2018. Unsurprisingly, "officer" was the most prevalent rank among those involved in OIS (over 90% of all OIS officers in both periods). Similarly, most shootings involved officers working in patrol capacity (roughly three-fourths of all OIS officers in both periods). Here, the most notable difference between the two periods is that Special Assignments Unit (SAU)[59] officers accounted for about one quarter of all OIS in 2018 (versus about one in eight OIS on average from 2009-17).

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[59] Special Assignments Unit (SAU) is the department's tactical unit.

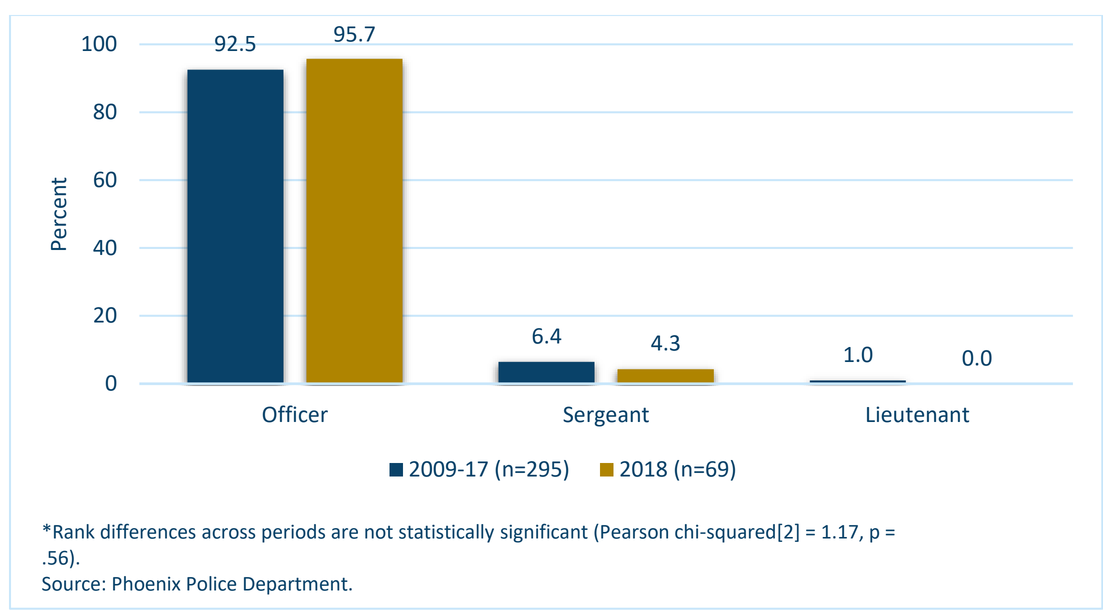



*Figure 30: Rank of PPD Officers Involved in OIS, 2009-17 v. 2018*

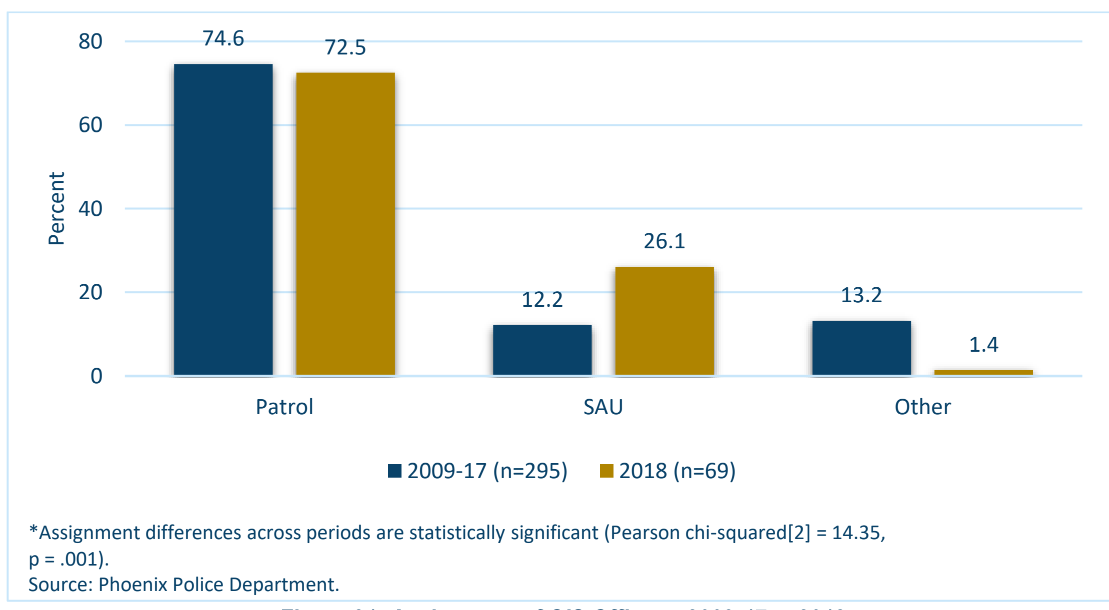



*Figure 31: Assignment of OIS Officers, 2009-17 v. 2018*

In terms of the uniform worn by officers involved in OIS, there were no significant differences between those that occurred from 2013-17 and those that occurred in 2018. Figure 32 indicates that roughly two-thirds of officers were wearing a standard patrol uniform at the time of the OIS, with most of the remaining officers wearing a tactical uniform. Note, however, that from 2013-17, approximately 5% of officers involved in OIS were in plain clothes, versus none of the officers involved in OIS in 2018. This may be due to the decline in proactive units within the agency in recent years as noted by the focus group participants earlier in the Study. The differences between the two periods were not statistically significant (Pearson $\chi^2 = 3.96$, $p = .14$).

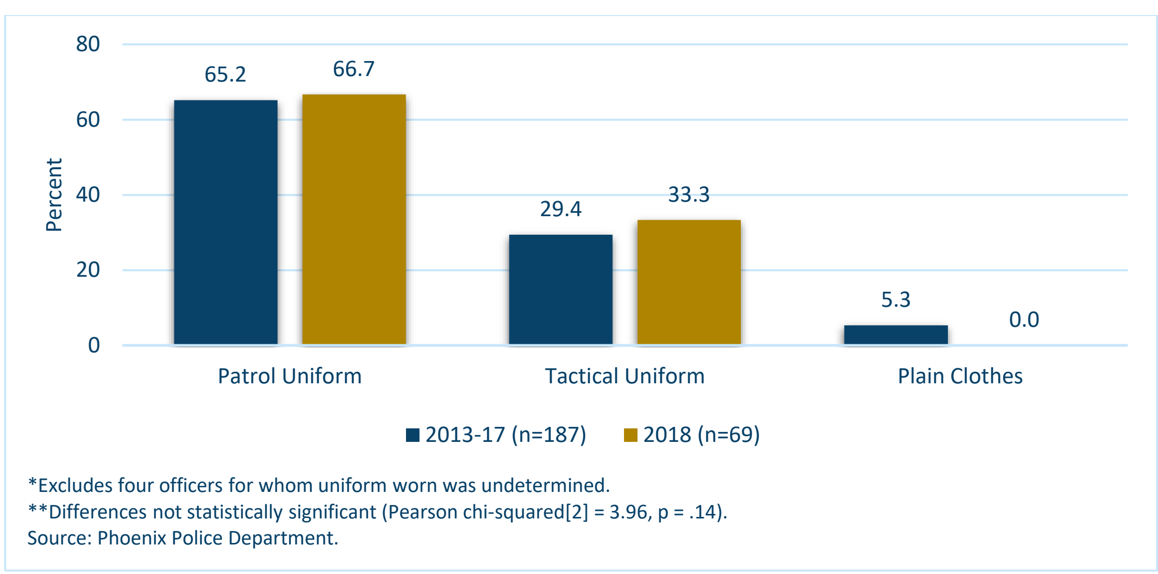



***Figure 32: Uniform Worn by PPD Officer at Time of OIS, 2013-17 v. 2018***

Figure 33 displays the type of firearm used by PPD officers during OIS from 2013-17 and in 2018. Most PPD OIS involved pistols (73% from 2013-17 and 62% in 2018). In 2018, nearly 38% of OIS involved rifles, versus just 25% from 2013-17. However, the differences between the two periods, in terms of the firearms used, were not statistically significant (Pearson $\chi^2 = 4.58$, $p = .10$).

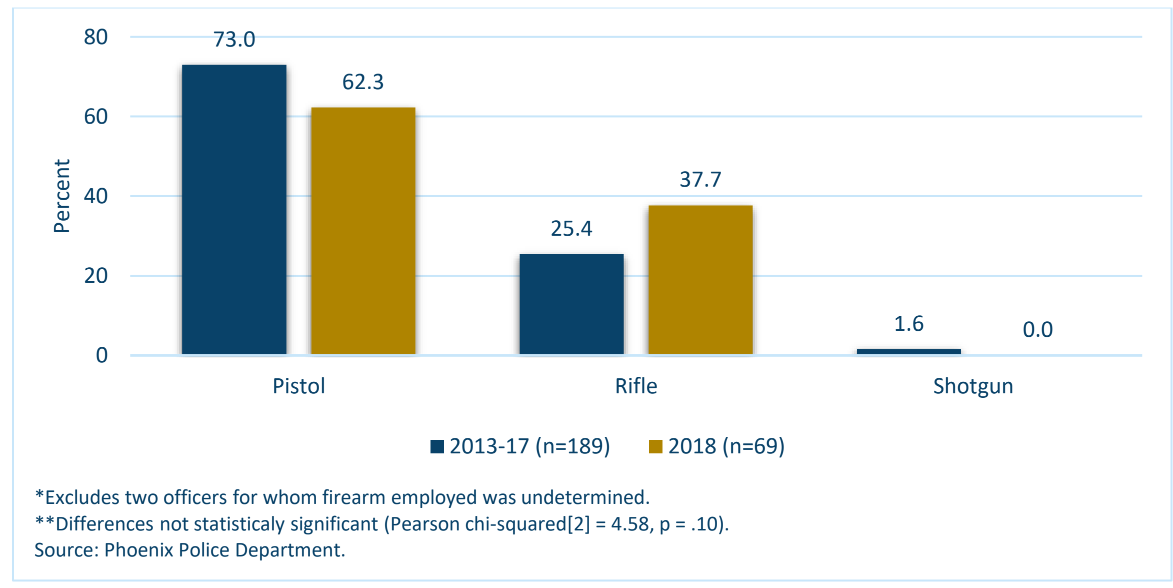



***Figure 33: Type of Firearms Employed by PPD Officers During OIS, 2013-17 v. 2018***

We next turned our attention to the approximate distance, in feet, between officers and subjects during OIS from 2013-17 and in 2018 (see Figure 34). Roughly 60% of all shootings involved an officer firing at a subject from inside of 25 feet. From 2013-17, distance ranged from less than one foot to 198 feet. In 2018, distance ranged from two feet to 221 feet. The difference in the mean firing distances between the two periods was not statistically significant ($t = -0.10$, $p = .92$).

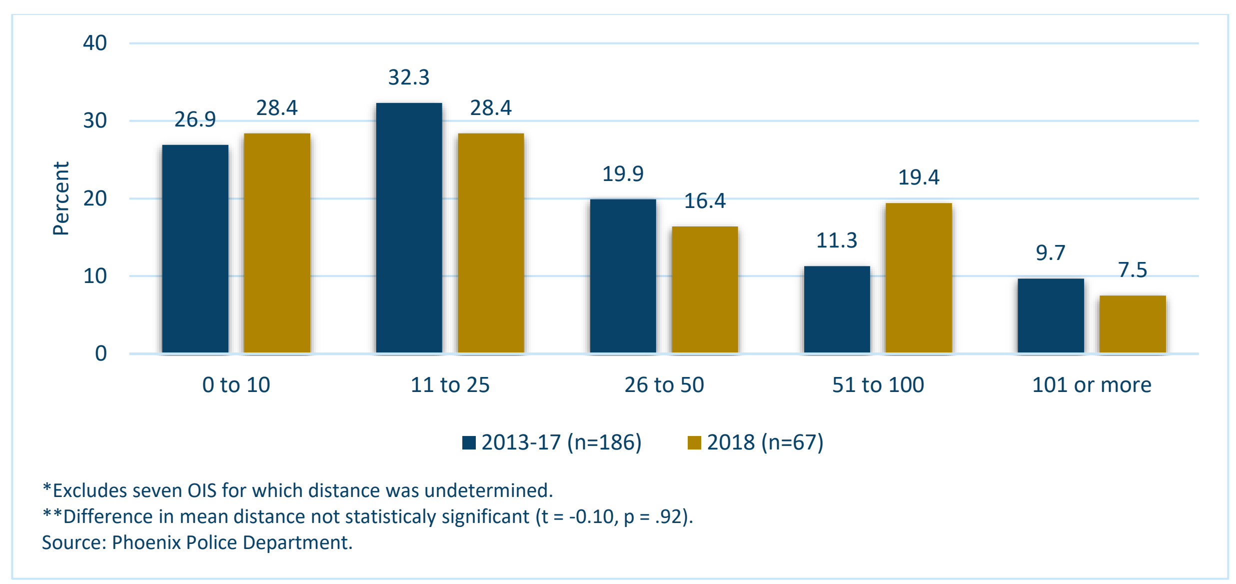



*Figure 34: Initial Firing Distances of OIS Officers to Subject (in feet) 2013-17 v. 2018*

Figure 35 displays the number of officers injured (fatally or non-fatally) during OIS from 2009 to 2018. For this chart, we display annual counts instead of percentages for 2018 versus years past, because officer injuries resulting from OIS are such a statistically rare phenomenon. Over the last ten years, the number of PPD officers injured as a result of OIS has ranged from one to six, with a mean of four per year. In 2018, two officers sustained nonfatal injuries from OIS, down from six each of the previous two years. There were two fatalities during this period - one in 2010, and another in 2014. Later in this report, we analyze assaults on officer data unrelated and related to OIS incidents.

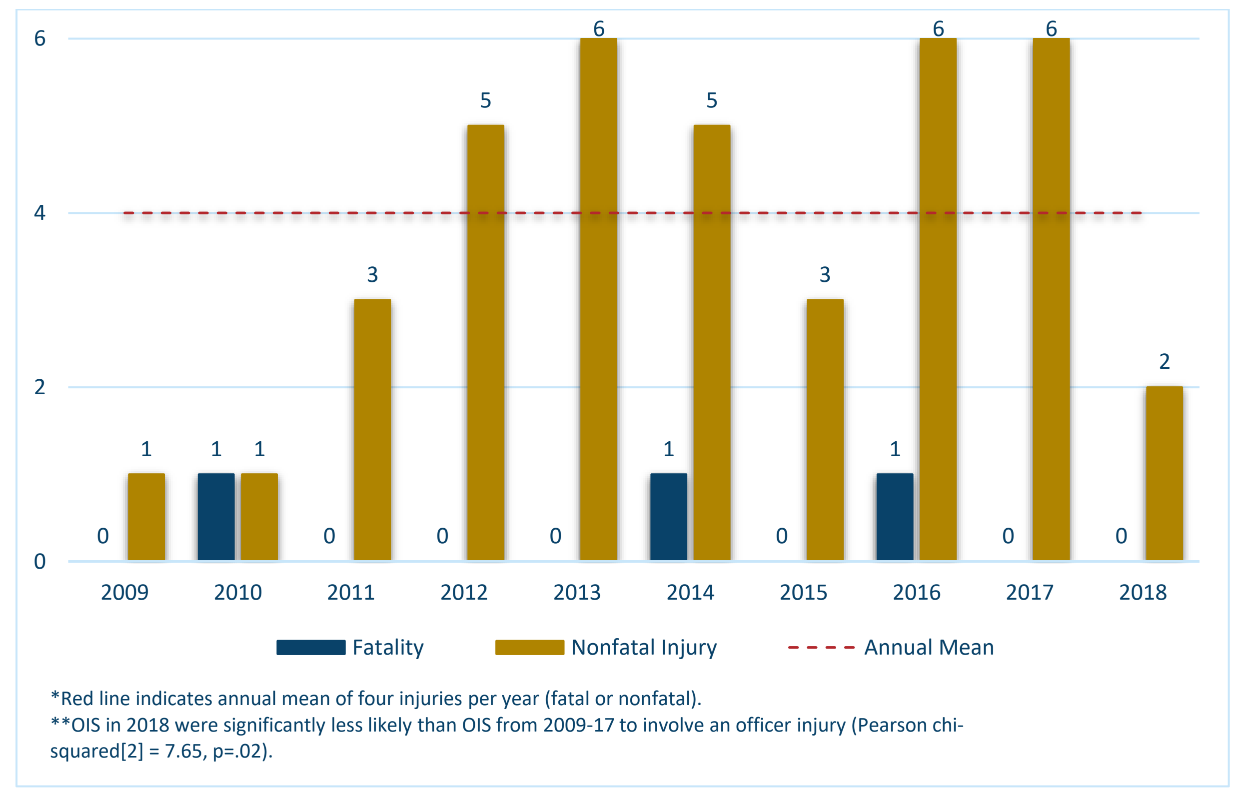



*Figure 35: Officer Injuries Resulting from Subject's Actions (2009-2018)*

## 4.3 Subject Characteristics

We now turn our attention to the characteristics of the subjects who were involved in PPD OIS from 2009 to 2018. Figure 36 displays the age of OIS subjects from 2009-17 and in 2018. From 2009-17, subject age ranged from 15 to 70 with a mean of 31.9 (median = 30). In 2018, subject age ranged from 14 to 77 with a mean of 36.4 (median = 35). The difference between the two periods, in terms of mean subject age, was statistically significant ($t = -2.45$, $p < .05$). Accordingly, subjects shot by PPD officers in 2018 tended to be slightly older than in years past. As shown in Figure 36, a greater percentage of 2018 OIS involved subjects in their 40s than previous years. Conversely, a smaller percentage of 2018 OIS involved subjects in their 20s.

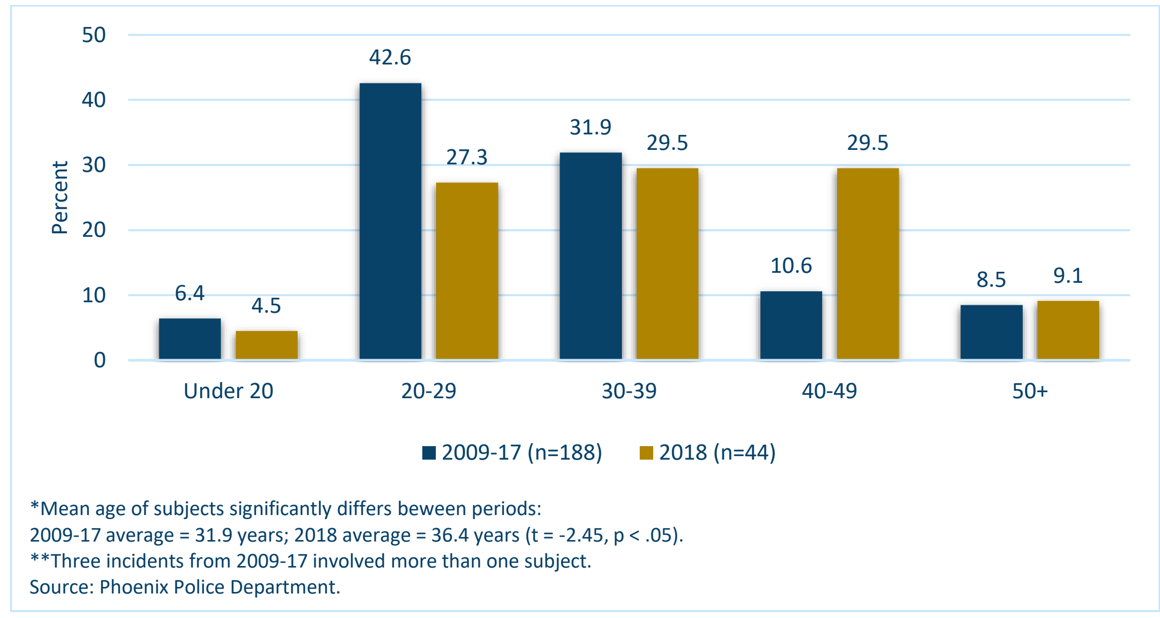



***Figure 36: Age of OIS Subjects, 2009-17 v. 2018***

Next, we compared the racial/ethnic and gender breakdown of OIS subjects from 2009-17 to those of 2018. First, we must point out that prior to October 2015, PPD had been logging "Hispanic" as a race in their old Records Management System (RMS). With the switch to a new RMS in October 2015, PPD began specifying "Hispanic" as an ethnicity. For our analysis, we treated Hispanic as a race for two pragmatic reasons. First, it allows us to examine 10 full years of data (2009-18) as opposed to just three (2016-18). Second, it is consistent with how officer race/ethnicity is coded.

Figure 37 displays the racial/ethnic breakdown of subjects shot by PPD officers from 2009-17 and in 2018. From 2009-17, about 37% of OIS subjects were white. This closely approximates 2018, in which about 36% of OIS subjects were white. The percentage of OIS subjects who were Hispanic fell from nearly 48% in 2009-17 to roughly 36% in 2018. Conversely, the percentage of OIS subjects who were black increased from about 11% in 2009-17 to almost 21% in 2018. Note, however, that these differences were not statistically significant (Pearson $\chi^2 = 4.17$, $p = .24$), meaning they are not more pronounced than we might expect to observe at any time by chance alone.

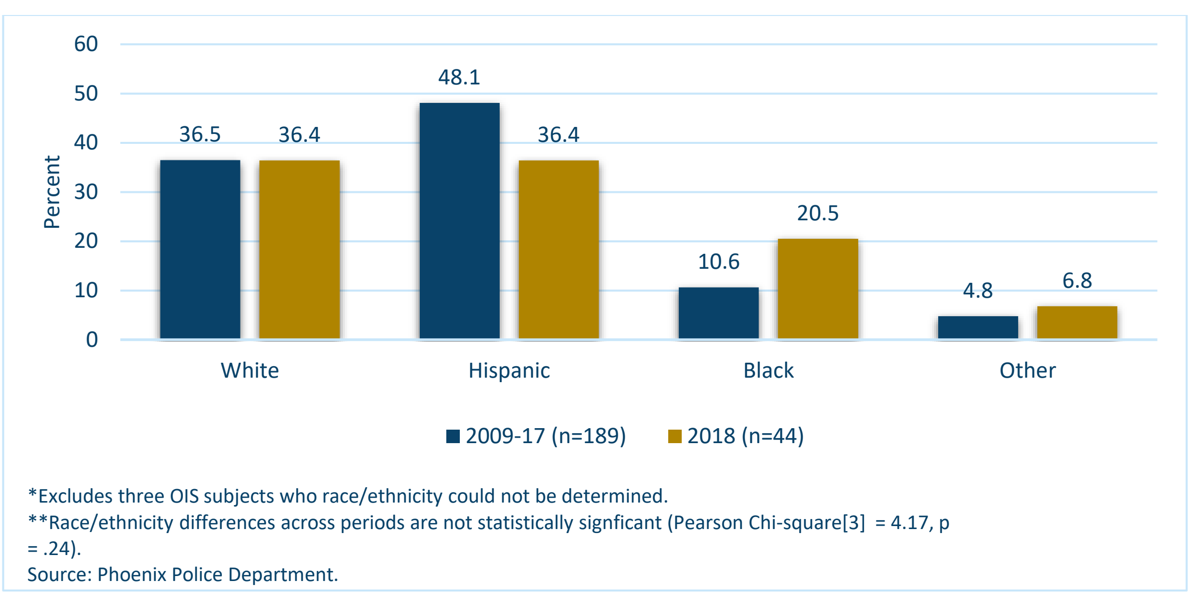



***Figure 37: Race/Ethnicity of OIS Subjects, 2009-17 v. 2018***

Figure 38 displays the gender breakdown of subjects shot by PPD officers from 2009-17 and in 2018. The overwhelming majority of OIS subjects (over 95%) were males, which is unsurprising given their overrepresentation in violent crime.[60] This finding is also consistent with the body of research on police use of deadly force.[61] [62] [63] [64] [65] [66] The difference between 2009-17 and 2018, in terms of the percentage of OIS involving male subjects, was not statistically significant (t = 0.11, p = .91).

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[60] Each year, males make up approximately 80% of all persons arrested for violent offenses. See, for example, https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/topic-pages/tables/table-33.

[61] "Shots fired: An examination of New York City Police firearms discharges," by J.J. Fyfe, 1978, Ph.D. dissertation (No. 78-14335 UMI), State University of New York at Albany.

[62] "Perils of police action: A cautionary tale from US data sets," by T.R. Miller, B.A. Lawrence, N.N. Carlson, D. Hendrie, I.R. Rockett, and R.S. Spicer, 2017, *Injury Prevention*, 23(1), 27-32.

[63] "A bird's eye view of civilians killed by police in 2015: Further evidence of implicit bias," by J. Nix, B.A. Campbell, E.H. Byers, and G.P. Alpert, 2017, *Criminology & Public Policy*, 16(1), 309-340.

[64] "What factors influence an officer's decision to shoot? The promise and limitations of using public data," by A.P. Wheeler, S.W. Phillips, J.L. Worrall, and S.A. Bishopp, 2017, *Justice Research and Policy*, 18(1), 48-76.

[65] "Identifying situational predictors of police shootings using multivariate analysis," by M.D. White, 2002, *Policing: An International Journal of Police Strategies & Management*, 25(4), 726-751.

[66] Exploring bias in police shooting decisions with real shoot/don't shoot cases," by J.L. Worrall, S.A. Bishop, S.C. Zinser, A.P. Wheeler, and S.W. Phillips, 2018, *Crime & Delinquency*, 64(9), 1171-1192.

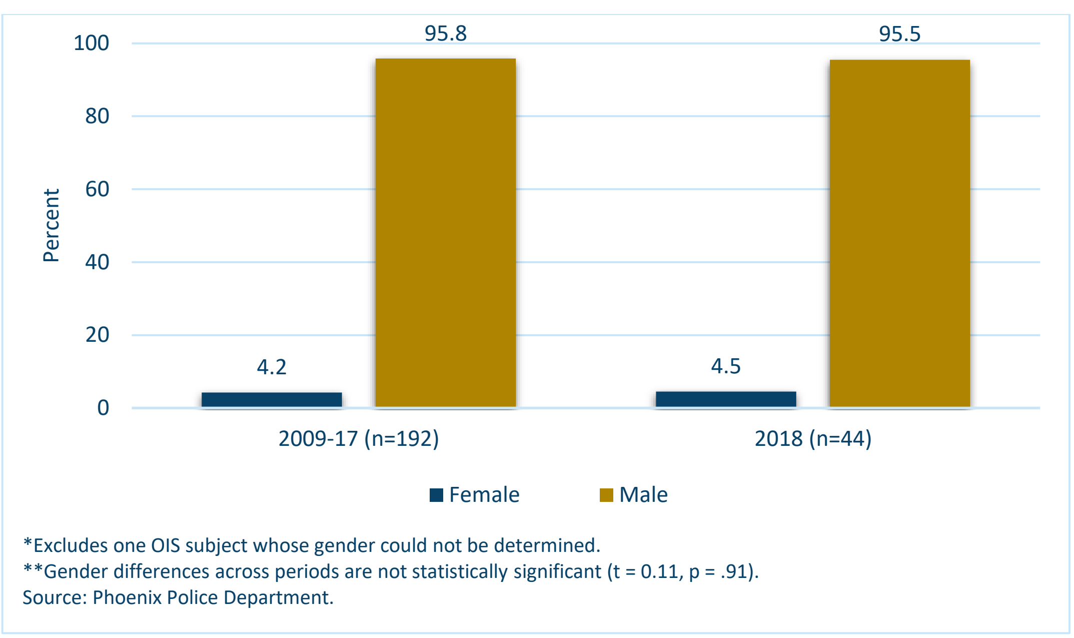



***Figure 38: Gender of OIS Subjects, 2009-17 v. 2018***

We also considered the weapon possessed (or lack thereof) by OIS subjects. Figure 39 compares 2009-17 to 2018 in terms of the weapons possessed by subjects at whom PPD officers shot. There is a stark difference in the percentage of OIS subjects armed with firearms. Whereas only about 52% of OIS subjects were armed with firearms from 2009-17, in 2018, 75% of OIS subjects were armed with firearms. This difference is statistically significant ($t = -2.77$, $p < .01$). This is an important finding that seems to square well with many of the focus group participants' arguments. Subjects shot by PPD officers in 2018 were much more likely to have been armed with a gun than in previous years. This is also reflected in the MCCA OIS data collection efforts where from 2014-2017, an average of 48.7% of subjects involved in an OIS were armed with a firearm, and in 2018, 53.5% of subjects were armed with a firearm.[67]

The percentage of OIS subjects armed with other dangerous instruments (e.g., knives, box cutters, TASERs) fell from 21% (n = 41) from 2009-17 to roughly 14% (n = 6) in 2018. Similarly, the percentage of OIS subjects who used a vehicle as a weapon fell from 12% (n = 24) from 2009-17 to 2% (n = 1) in 2018. All told, 25 OIS involved subjects who used their vehicle as a weapon from 2009-18.

Continuing our comparison of weapons possessed by OIS subjects across periods, roughly 4% of OIS subjects attempted to gain control of officers' firearms or used bodily force on officers from 2009-17, whereas zero incidents of this type were reported in 2018. In 2018, nearly 7% of OIS subjects (n = 3) were in possession of a simulated gun, compared to 2.1% (n = 4) from 2009-17. A "simulated gun" refers to when a subject states that he has a gun and intends to use it and has a non-functional "prop" that appears to be a firearm (e.g., the stock of a rifle covered by a towel). Conversely, toy guns refer to those that by manufacture, design, or modification appear to be real, working firearms (i.e., a plastic, brightly colored toy gun that is obviously not real would have been coded as "no weapon used"). From 2009-17, seven OIS (3.6%) involved a toy gun, compared to zero in 2018. Finally, the percentage of OIS subjects who were unarmed was virtually identical across the two periods: 2.1% (n = 4) from 2009-17 and 2.3% (n = 1) in 2018. These findings suggest that in 2018, Phoenix police officers faced more subjects armed with guns (or simulated guns) than in years past, and were no more likely to shoot at an unarmed subject than in years past.

[67] As analyzed from data taken from the National Police Foundation/Major Cities Chiefs Association Officer Involved Shooting Database, 2019.

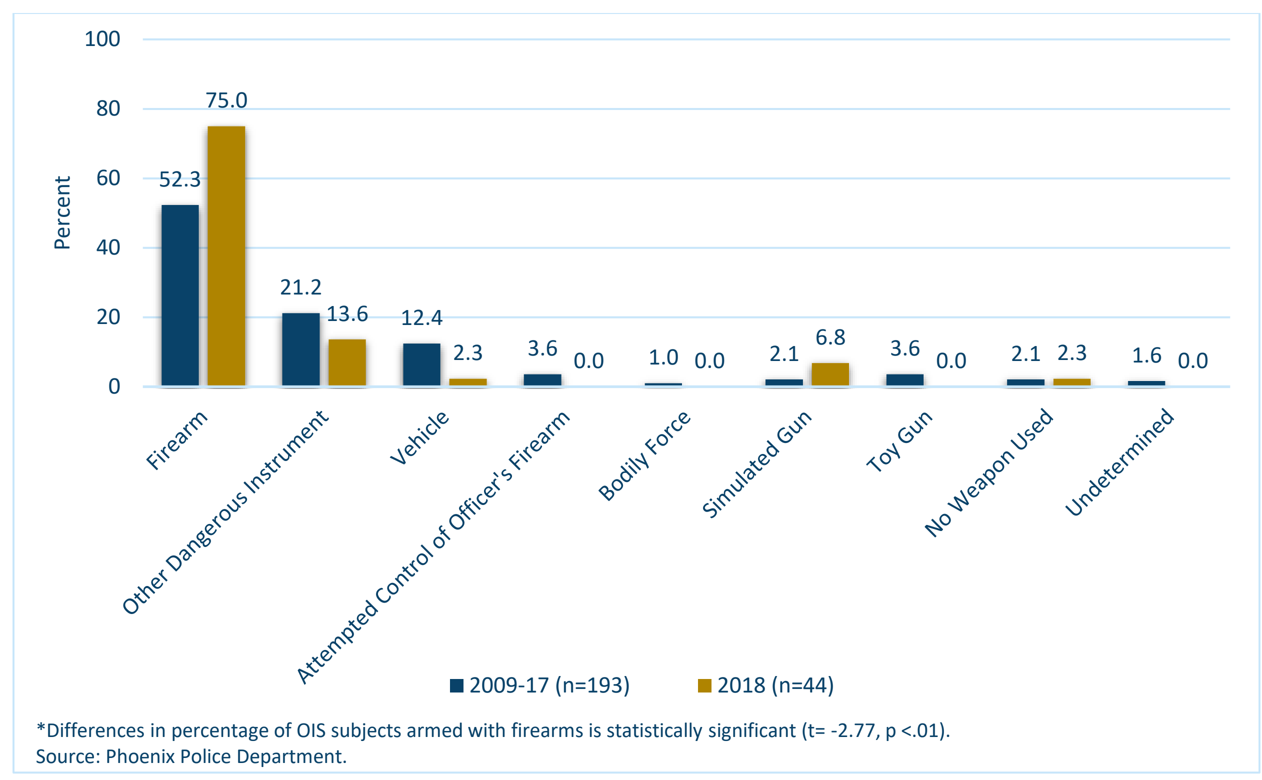



***Figure 39: Weapon Used by Subject During OIS, 2009-17 v. 2018***

Finally, we considered subject injuries resulting from OIS. Figure 40 indicates whether the subject involved was killed, nonfatally wounded, committed “suicide-by-cop,” or did not sustain any injuries. From 2009-17, approximately 53% of OIS subjects were killed, compared to 50% in 2018. Over 27% of OIS subjects were non-fatally wounded from 2009-17, versus almost 30% in 2018. Over the last 10 years, only two subjects have committed suicide-by-cop - one in 2010 and another in 2012. Finally, the percentage of OIS subjects who were not injured rose to almost 21% in 2018, compared to 15% from 2009-17. Yet again, we found that these differences were not statistically significant (Pearson $\chi^2 = 2.82$, $p = .59$).

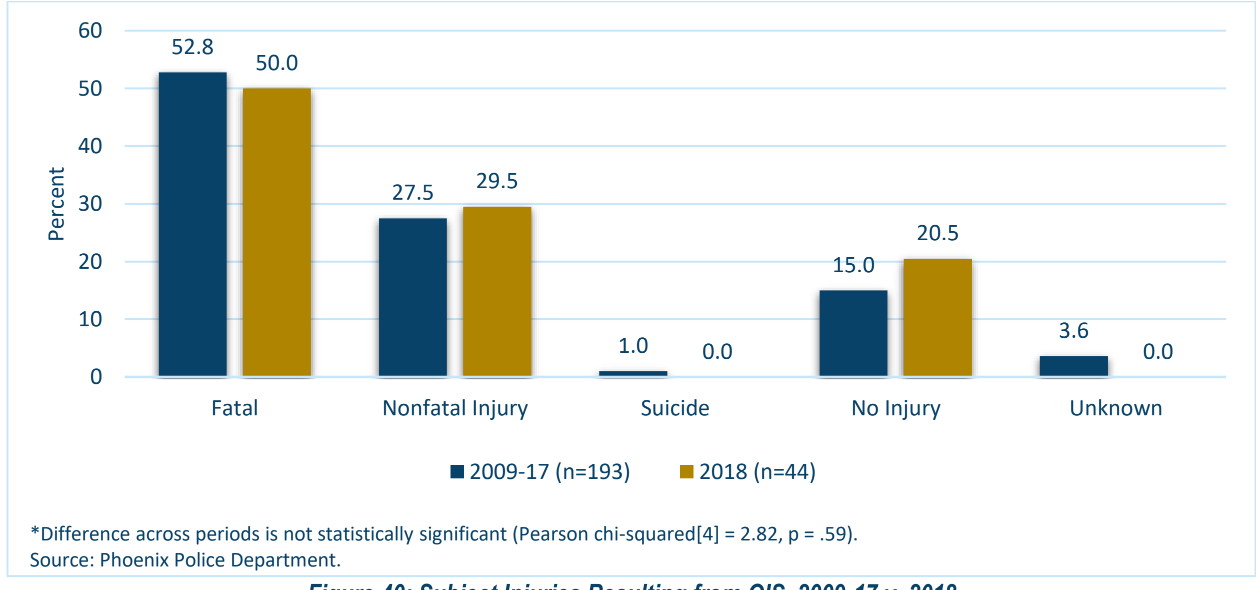



***Figure 40: Subject Injuries Resulting from OIS, 2009-17 v. 2018***

## 5. Trends in Relation to OIS

As other researchers have noted with respect to the study of nonlethal force, "[I]f we are to know more about the avoidance of force in policing, it makes a lot of sense to study everyday incidents when force is not used."[68] The same logic applies when studying police use of deadly force. Namely, we need to know how often officers found themselves in situations where it might have been reasonable for them to use deadly force, but they ultimately did not.[69] [70] [71] [72] Yet, identifying this universe of police-community interactions is no easy task, and currently there is no consensus on what the best "benchmark" is.[73] Nevertheless, studies have consistently demonstrated a strong relationship between community violence and OIS, such that OIS tend to increase as the level of community violence increases.[74] [75] [76] [77] [78] [79] [80] In light of such findings, we analyzed several other data – including use of nonlethal force, violent crime, arrests, and assaults on officers – in order to identify other recent trends with respect to the policing climate in Phoenix that might further contextualize OIS trends.

### 5.1 Use of Force Incidents and Complaints

In addition to lethal force, officers have the authority to use less severe forms of physical force[81], including but not limited to verbal commands, handcuffing, "soft" or "hard" empty hand techniques, Oleoresin Capsicum (OC) spray, electronic control devices (ECDs, more commonly known as TASERs), impact weapons (e.g., batons), and unleashing canines. Not surprisingly, research suggests these "less than lethal force" incidents are more common than lethal force incidents.[82] [83] PPD refers to these tactics as "intermediate control techniques" (ICTs). Figure 41 shows the total number of incidents that involved ICTs each year from 2009 to 2018, which ranged from a low of 510 in 2016 to a high of 768 in 2009.[84] After a three-year decline from 2014 to 2016, ICTs have increased slightly each of the last two years but remained below the ten-year mean of 663.

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[68] "Making every police-citizen interaction count: The challenges of building a better cop," by L. Mazerolle, and W. Terrill, 2018, *Criminology & Public Policy*, 17(1), 89-96.
[69] "Insights on officer safety from officer-involved shooting and near miss incidents," by A. Askey, B. Cowell, and J. Burch, 2018, *Police Chief*, 85(5), 42-45.
[70] "Explaining the disparity in results across studies assessing racial disparity in police use of force: A research note," by L.A. Fridell, 2017, *American Journal of Criminal Justice*, 42(3), 502-513.
[71] "An empirical analysis of racial differences in police use of force," by R.G. Fryer, 2018, *Forthcoming at Journal of Political Economy* (available as NBER working paper NO. 22399).
[72] "What factors influence an officer's decision to shoot? The promise and limitations of using public data," by A.P. Wheeler, S.W. Phillips, J.L. Worrall, S.A. Bishopp, 2017, *Justice Research and Policy*, 18(1), 48-76.
[73] See footnote 15
[74] "The determinants of deadly force: A structural analysis of police violence," by D. Jacobs, 1998, *American Journal of Sociology*, 103(4), 837-862.
[75] "Race, crime, and the micro-ecology of deadly force," by D. Klinger, R. Rosenfeld, D. Isom, and M. Deckard, 2016, *Criminology & Public Policy*, 15(1), 193-222.
[76] "Specifying and testing the threat hypothesis: Police use of deadly force," A.E. Liska, J. Yu, 1992, *Social Threat and Social Control*, 53-68.
[77] "The temporal relationship between police killings of civilians and criminal homicide: A refined version of the danger-perception theory," by J.M. MacDonald, R.J. Kaminski, G.P. Alpert, and A.N. Tennenbaum, 2001, *Crime & Delinquency*, 47(2), 155-172.
[78] "Officer-involved shootings: Context means everything," by J. Nix, and G.P. Alpert, 2018, *Police Chief*, 85(6), 18-19.
[79] "Measuring homicide by police officers," by L.W. Sherman, and R.H. Langworthy, 1979, *Journal of Criminal Law & Criminology*, 70, 546-560.
[80] "Factors related to killings of felons by police officers: A test of the community violence and conflict hypotheses," by J.R. Sorensen, J.W. Marquart, and D.E. Brock, 1993, *Justice Quarterly*, 10(3), 417-440.
[81] "The functions of police in modern society," by E. Bittner, 1970, Washington, DC: Government Printing Office.
[82] "Toward a national estimate of police use of nonlethal force," by M.J. Hickman, A.R. Piquero, and J.H. Garner, 2008, *Criminology & Public Policy*, 7(4), 563-604.
[83] "Neighborhood context and police use of force," by W. Terrill, and M.D. Reisig, 2003, *Journal of Research in Crime and Delinquency*, 40(3), 291-321.
[84] In all analyses of incidents involving ICTs, note that we have excluded 84 incidents in which officers used force on aggressive dogs.

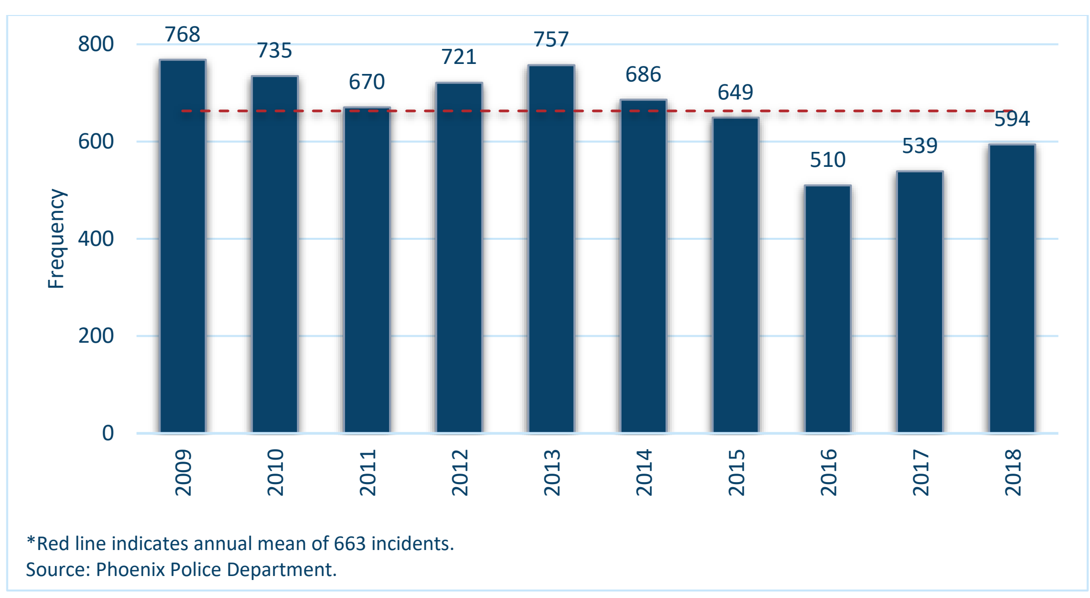



***Figure 41: PPD Incidents Involving Intermediate Control Techniques (ICTs), 2009-2018***

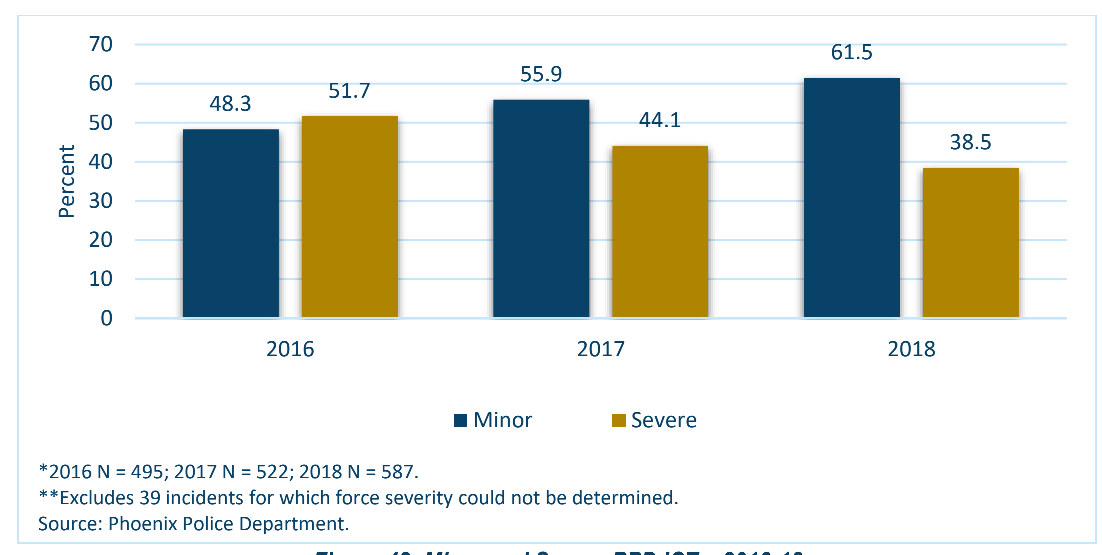



***Figure 42: Minor and Severe PPD ICTs, 2016-18***

Of course, some ICTs are more severe than others. For example, few would argue with the contention that handcuffing a subject is a less severe form of force than striking a subject with a baton. We placed ICTs that occurred from 2016-18 into one of two categories: minor or severe. *Minor* ICTs included handcuffing, control techniques, takedowns, and soft or hard empty hand techniques. *Severe* ICTs included ECD deployments, OC spray, impact weapons, carotid holds, and canines. Figure 42 displays the percentage of ICTs that fell into these categories each of the last three years (based on the most severe ICT used). While there has been an *overall* increase in ICTs since 2016, this was driven largely by an increase in minor ICTs. In fact, severe ICTs have declined slightly over the last three years (from 256 in 2016 to 226 in 2018). This suggests that in recent years, PPD officers have been slightly more willing to "go hands on," (e.g., use takedowns, open soft or hard hands) with subjects when force is required. This seems to coincide with a slight decline in their willingness to use ECDs or other less-lethal weapons that keep distance between the officer and the subject. This contradicts some of the focus group participants' arguments that officers are less willing to go hands on with subjects which has contributed to more incidents escalating to lethal force situations. In fact, the opposite may have occurred, but the data cannot speak to the progression of force within each OIS incident. It also highlights a

contradiction in trends, namely that although the most severe form of force (OIS) doubled in 2018, there was not a significant increase in ICTs in general or severe ICTs, specifically.

Next, we examined three-year trends in ICTs involving armed subjects (see Figure 43). From 2016 to 2018, PPD officers were involved in 375 ICTs wherein subjects were armed with 398 potentially deadly weapons (note that some subjects were armed with more than one type of weapon). This means that, on average, PPD officers used *nonlethal* force 125 times per year each of the last three years on subjects who were armed with firearms, knives, blunt objects, or other potentially deadly weapons. Many of these incidents can be considered averted OIS—officers may have had legal authority to use deadly force but were successfully able to use ICTs to gain compliance. There was no statistically significant increase or decrease in such incidents from 2016 to 2018.

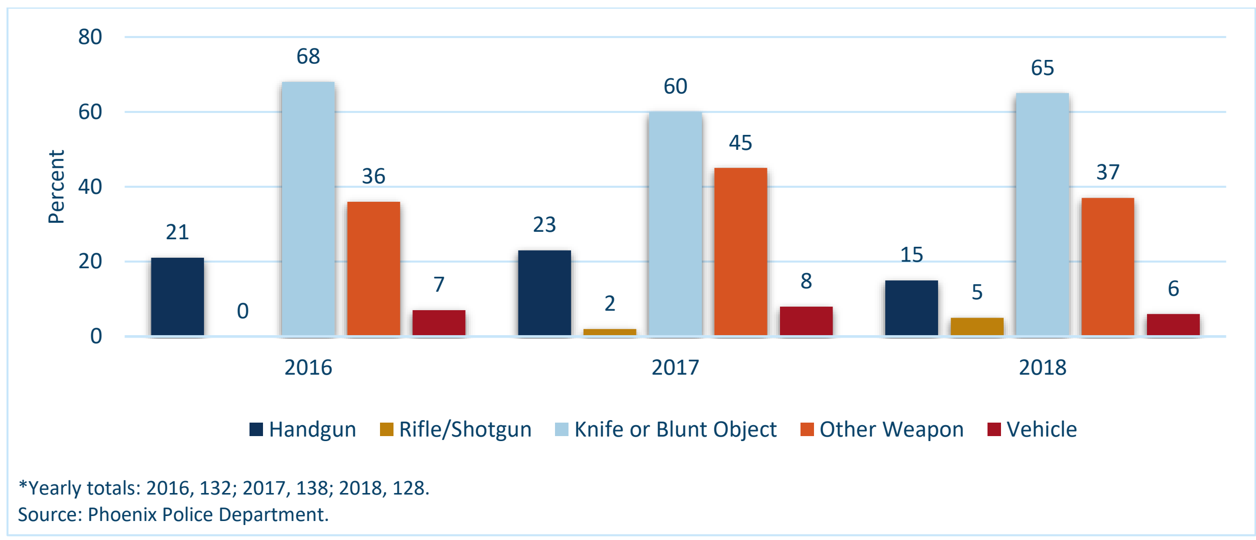



***Figure 43: Weapons Possessed by Subjects During PPD Incidents Involving ICTs, 2016-18***

Figure 44 compares the highest level of resistance offered by subjects during ICT incidents from 2016-17 and in 2018. Levels of resistance included: none, verbal noncompliance, psychological intimidation, passive resistance, defensive resistance, active aggression, aggravated active aggression, and other. From 2016 to 2017, there were 1,013 ICTs wherein the subjects' level of resistance could be determined. The majority of subjects (roughly 56%) displayed either active or aggravated active aggression. This was similar to 2018, in which about 52% of 587 less than lethal force incidents involved subjects who displayed active or aggravated active aggression. The difference between the two periods, in terms of levels of resistance offered by subjects, was not statistically significant (Pearson $\chi^2 = 8.88$, $p = .26$). Importantly, these results once again underscore the high number of incidents that could be considered averted OIS. Under many circumstances, officers are permitted to use deadly force when facing aggravated active aggression from a subject. Yet, about 8% of ICTs in 2018 involved officers using non-deadly force to gain compliance from a subject who was demonstrating aggravated active aggression.

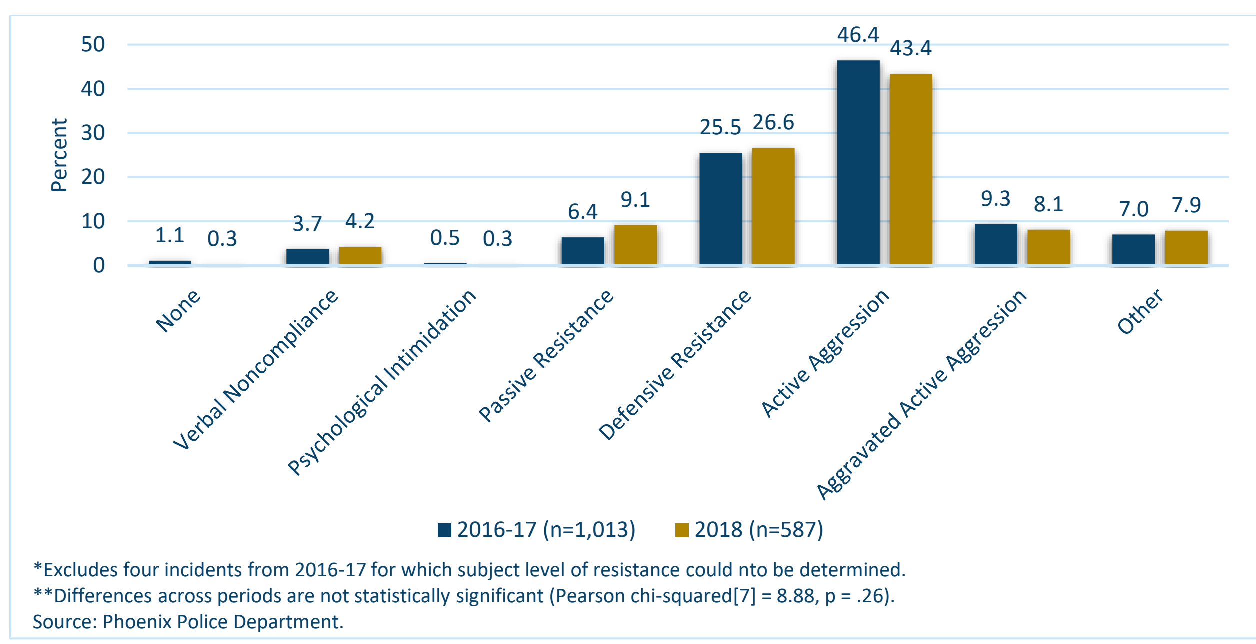



***Figure 44: Level of Resistance by Subjects During Incident Involving ICTs, 2016-17 v. 2018***

We also examined over four years' worth of use of force incidents (January 2014 through June 2018) that resulted in community member complaints, or triggered reviews by the PPD Professional Standards Bureau (PSB). These are summarized in Figure 45. In 2014, 108 use of force incidents resulted in a community member complaint or a PSB review. In the three years that followed, the number ranged from 72 to 86. Throughout the first six months of 2018, only 29 use of force incidents triggered a complaint or PSB review. The majority of these complaints and reviews were unfounded and required no further action. The number of sustained complaints has ranged from one to five each year (less than 7% of the total each year), and the number of unresolved complaints has ranged from one to nine (less than 9% of the total each year).

| Year | Total | Unresolved | Sustained |
|---|---|---|---|
| 2014 | 108 | 9 | 4 |
| 2015 | 78 | 4 | 5 |
| 2016 | 72 | 3 | 2 |
| 2017 | 86 | 1 | 5 |
| 2018* | 29 | 1 | 1 |

*As of 6/30/18.
Source: Phoenix Police Department.

***Figure 45: PPD Use of Force Incidents Resulting in Community Member Complaints or PSB Reviews***

Figure 46 displays the number of use of force incidents that triggered complaints or PSB reviews each month for the 54-month period for which we had data. Throughout this period, on average, 6.8 use of force incidents triggered complaints or PSB reviews per month. The total ranged from a low of one in October 2017 to a high of 17 in April and June of 2014.

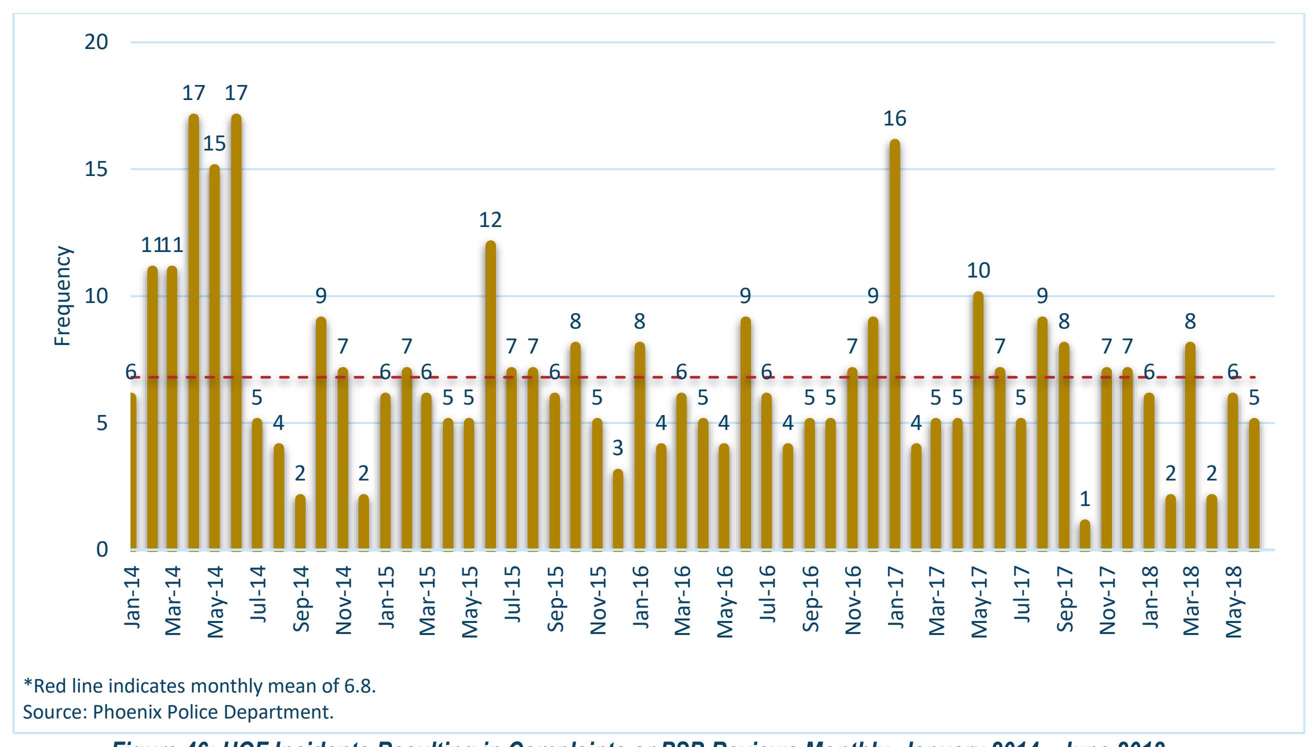



***Figure 46: UOF Incidents Resulting in Complaints or PSB Reviews Monthly, January 2014 - June 2018***

## 5.2 Violent Crime in Phoenix

As discussed earlier, research has consistently demonstrated a strong relationship between community violence and police use of deadly force.[85] [86] [87] [88] [89] [90] [91] We gathered 10 years of violent crime data from the FBI's Uniform Crime Report (UCR) so that we could compare trends in OIS to trends in the violent crime rate (See Figure 47). The number of violent crimes (homicides, rapes, robberies, and aggravated assaults) increased every year from 2014 to 2017. Concurrently, OIS have trended upward since 2015. However, from 2017 to 2018, the violent crime rate decreased from 760.9 to 719.3 violent crimes per 100,000 population, respectively.

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[85] "The determinants of deadly force: A structural analysis of police violence," by D. Jacobs, 1998, *American Journal of Sociology*, 103(4), 837-862.

[86] "Race, crime, and the micro-ecology of deadly force," by D. Klinger, R. Rosenfeld, D. Isom, and M. Deckard. 2016, *Criminology & Public Policy*, *15*(1), 193-222.

[87] "Specifying and testing the threat hypothesis: Police use of deadly force," A.E. Liska, J. Yu, 1992, *Social Threat and Social Control*, 53-68.

[88] The temporal relationship between police killings of civilians and criminal homicide: A refined version of the danger-perception theory," by J.M. MacDonald, R.J. Kaminski, G.P. Alpert, and A.N. Tennenbaum, 2001, *Crime & Delinquency*, 47(2), 155-172.

[89] "Officer-involved shootings: Context means everything," by J. Nix, and G.P. Alpert, 2018, *Police Chief*, 85(6), 18-19.

[90] "Measuring homicide by police officers," by L.W. Sherman, and R.H. Langworthy, 1979, *Journal of Criminal Law & Criminology*, 70, 546-560.

[91] "Factors related to killings of felons by police officers: A test of the community violence and conflict hypotheses," by J.R. Sorensen, J.W. Marquart, and D.E. Brock, 1993, *Justice Quarterly*, 10(3), 417-440.

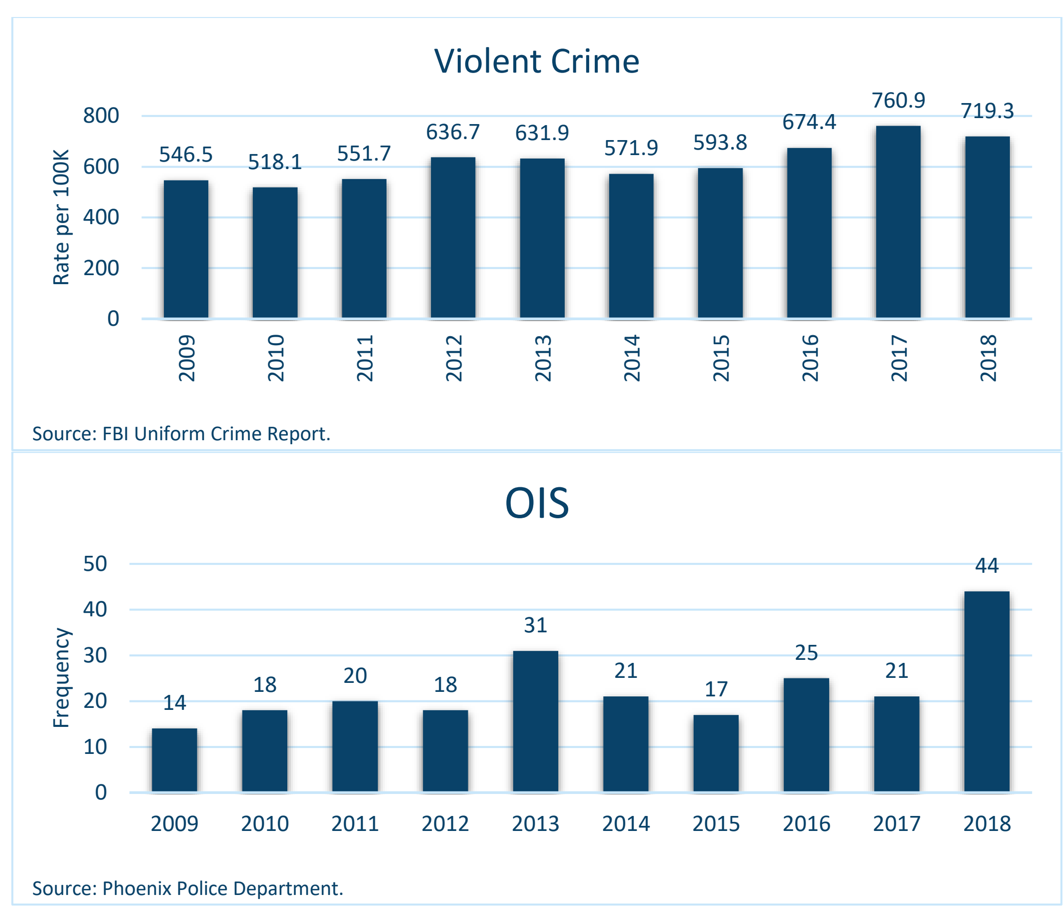



*Figure 47: Violent Crime Compared to PPD OIS Incidents 2009-2018*

Another way to attempt to make sense of the trend in OIS is to create a rate per 1,000 violent crimes, as we did earlier in Figures 8 and 11 (i.e., divide the number of OIS by the number of violent crimes for each year and multiply by 1,000). Figure 48 shows the number of OIS per 1,000 violent crimes each year. The average rate over the last ten years was 2.3 OIS per 1,000 violent crimes, and it ranged from a low of 1.6 in 2009 to a high of 3.6 in 2018. Thus, even when standardizing OIS by violent crime rate in order to make year over year comparisons, 2018 was above average.




*Figure 48: PPD OIS per 1,000 Violent Crimes, 2009-2018**

## 5.3 Arrests

Figure 49 indicates that arrests (including “booking” and “other” arrests) have generally trended downward over the last ten years, despite a slight uptick since 2016. This appears to be in contrast with OIS, which have trended upward in recent years. At the time of the Study, we only had arrest data for the first ten months of 2018 (n = 44,904). Using the average monthly number of arrests through the first ten months (n = 4490.4), we estimated a year-end total of 53,885 arrests, which would represent a 5.6% increase from 2017.

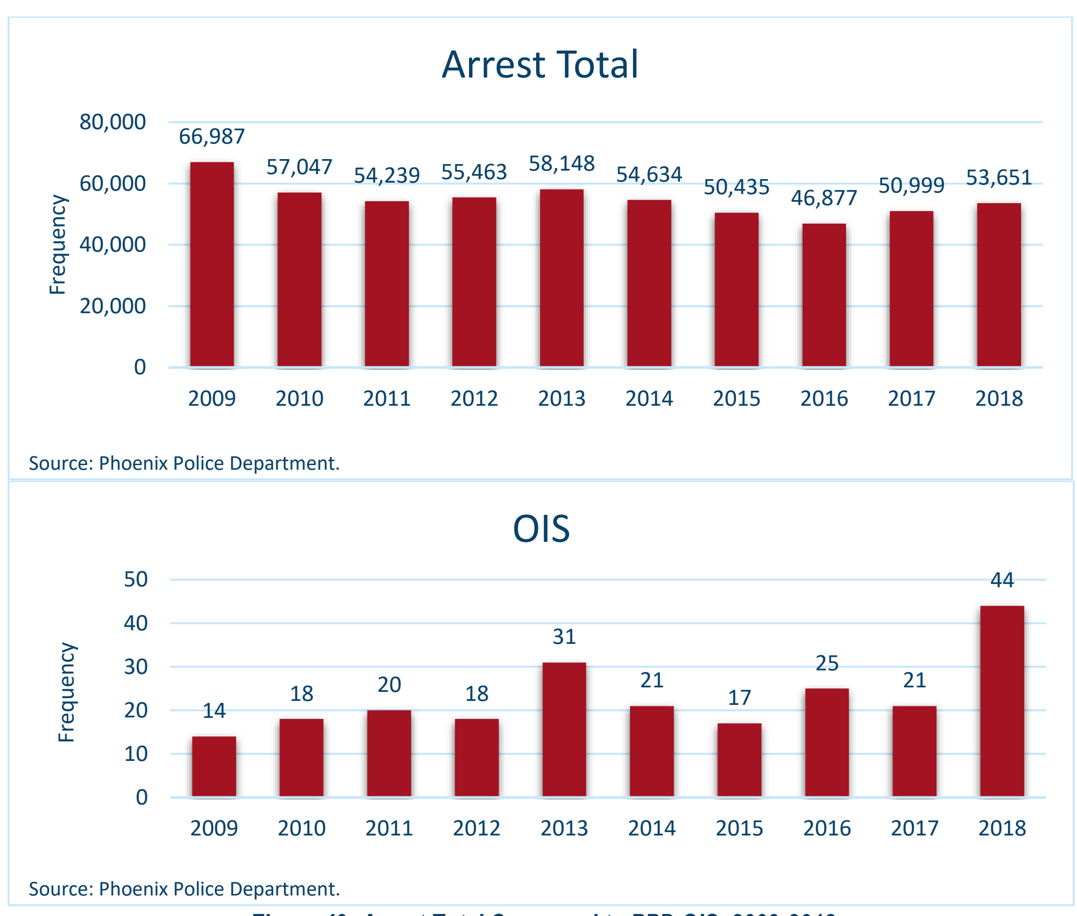



***Figure 49: Arrest Total Compared to PPD OIS, 2009-2018***

## 5.4 Assaults on Officers

Figure 50 compares the trend in officers assaulted by subjects to the trend in OIS from 2009 to 2018. Two noteworthy findings emerged. First, in 2017, a 52% increase in assaults on officers occurred, relative to 2016. The number of assaults remained relatively stable in 2018. This corresponded with the observed spike in OIS in 2018. Second, the decline in assaults from 2013 to 2015 corresponds with a decline in OIS around the same time. These findings echo some of the comments made by officers during our focus groups. Simply put, PPD officers were more likely to be assaulted by subjects during 2017 and 2018 than in previous years.

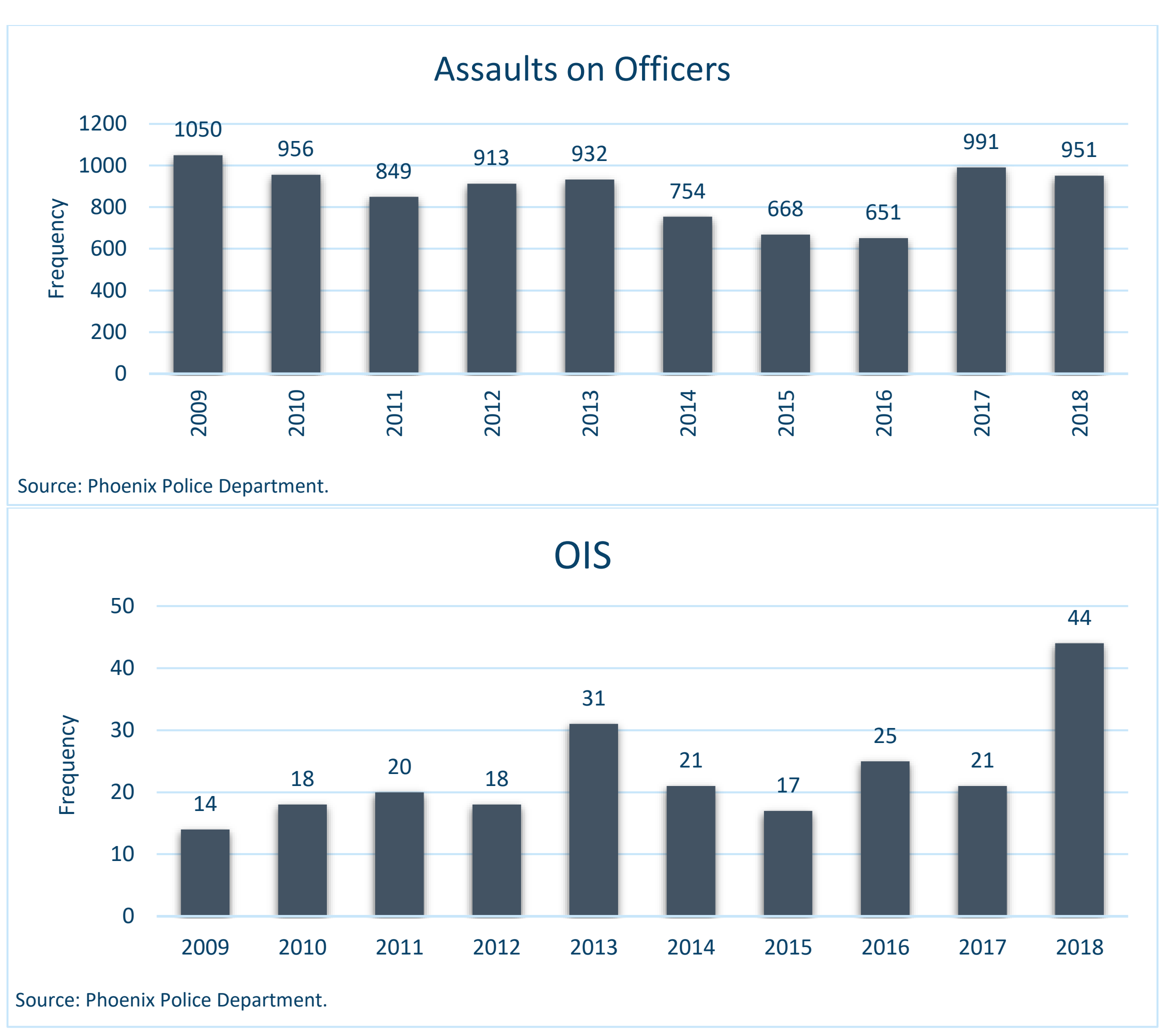



*Figure 50: Assaults on PPD Officers Compared to OIS Incidents, 2009-2018*

In terms of officers who were injured during assaults, we were only able to examine data going back to 2016 (see Figure 51). Still, a 33% increase in injuries was noted in 2017 relative to 2016, and 2018 marked a 6.5% increase from 2017.

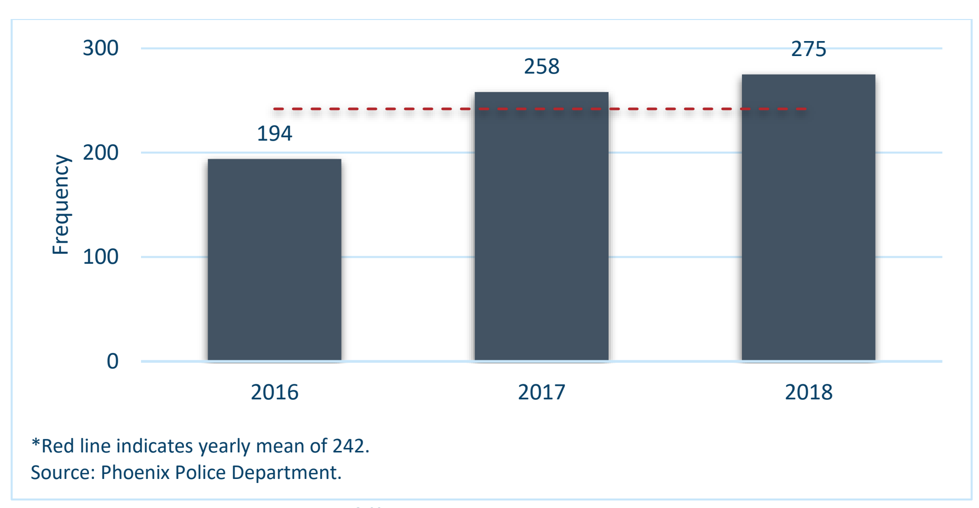



***Figure 51: PPD Officers Injured During Assaults, 2016-2018***

In focus groups, officers mentioned that they perceived that community members have been more willing to pull guns on them [officers] lately. The data presented in Figure 52 supports this claim. The number of officers assaulted by subjects with firearms doubled from 42 in 2017 to 87 in 2018. Here again, the findings comport with several other sections of the Study. Compared to previous years, PPD officers were more likely in 2018 to face armed subjects, be assaulted, and have guns used against them.

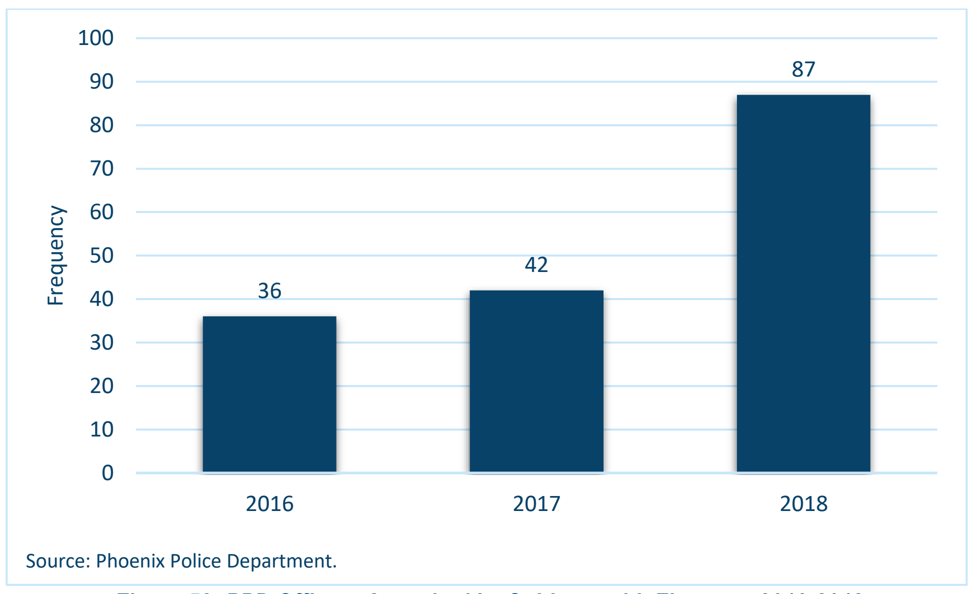



***Figure 52: PPD Officers Assaulted by Subjects with Firearms, 2016-2018***

Figure 53 breaks the years 2016, 2017 and 2018 down into months. From January 2016 through December 2018, 4.58 officers were assaulted with guns per month on average. Notice the sharp increase in gun assaults that occurred during the first half of 2018. A total of two officers were assaulted with guns in January 2018. In June, 34 officers were assaulted with guns, and the six-month total was 72. At least five officers were assaulted with guns for five different months in 2018 – each of which was above the three-year monthly average. While 2018 was an outlier in terms of the number of OIS, we observed another outlier trend in the data. Subjects were significantly more likely to assault officers with guns during 2018 than in years past.

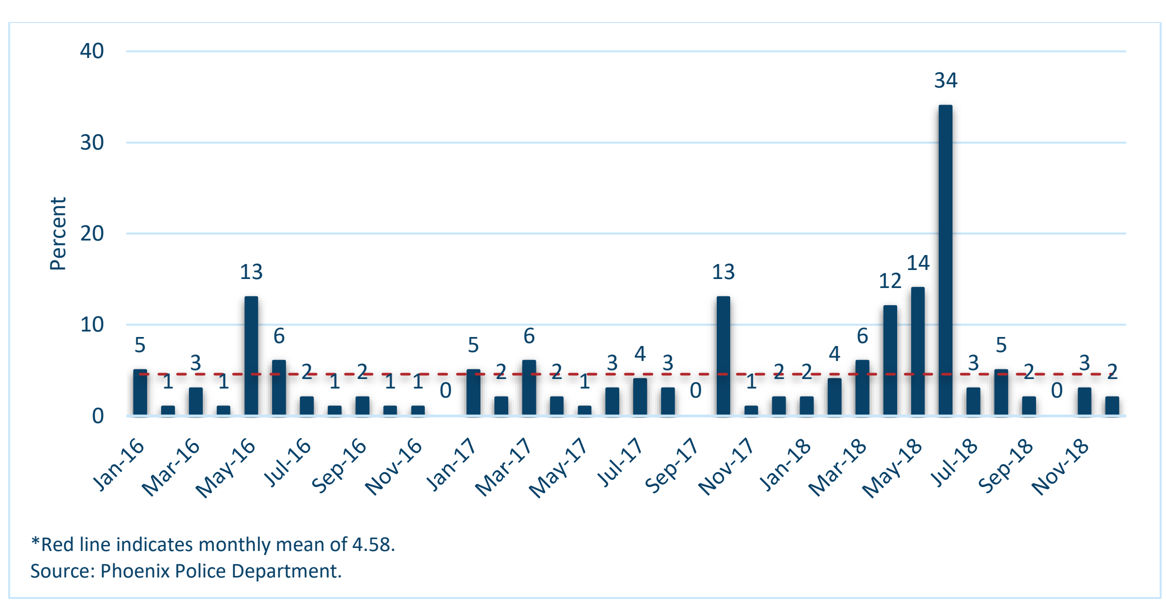



***Figure 53: PPD Officers Assaulted by Subjects with Firearms, Monthly, 2016-2018***

Finally, 2018 saw a sharp increase in officers ambushed by subjects with firearms (see Figure 54). There was one such incident in 2016, and two in 2017. In 2018, there were seven incidents of ambush. Ambushes are documented by PPD in accordance with the FBI's LEOKA program.

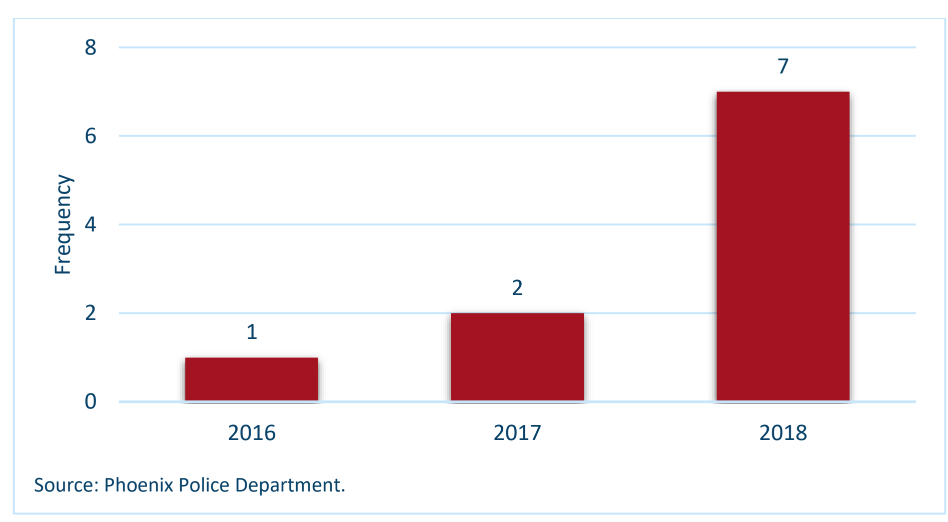



***Figure 54: PPD Officers Ambushed by Subjects with Firearms, 2016-2018***

## 6. Use of Force and Related Officer-Involved Shooting Policies and Training

As we have noted, PPD has gone through a review and resulting modifications of force-related policies and training over the past few years. This section will discuss the changes PPD has made in policies and training, including the contents of these documents and the results from interviews with PPD trainers.

The ASU Report that showed results on analysis of OIS data from 2009 to 2014 made important suggestions that were based, in part, on the Collaborative Reform Recommendations made to the Las Vegas Police Department by The U.S. Department of Justice.[92] The Review was designed to "identify potential trends and contributing factors" (P. 7) of OIS. The ASU Report identified several areas that warranted improvement including, in-service training, de-escalation techniques and reviews or debriefs following OIS incidents.

As an immediate response to the ASU Report, PPD set out to improve its policies and training. One response was to create a specific 40-hour training module required for all officers. Policies were reviewed and improved, and the training included use of force policy updates, responding to subjects in crisis including de-escalation, reviewing OIS, threat assessment, and tactics, among others. Suggestions made in the ASU Report focused on legal mandates and responses to encounters with members of the public, including specific strategies such as reality-based training, understanding force options, methods to review force and critical incidents, and providing officer assistance after a critical incident, including an OIS.

Based on many of the recommendations made in the ASU Report, PPD developed new courses, upgraded old ones and improved the process to hold officers accountable for their training. We were provided the new policies and lesson plans and were able to observe the training that involved communication, tactics and force options, and decision-making. Perhaps the most important changes we noted that PPD made since the ASU Report was the inclusion of scenario or reality-based training and active debriefs of officers who completed the training. In other words, officers were provided and trained on the policy changes that were made by PPD, and then trained to those policies with enhanced training that was designed to provide them with tools to learn critical thinking, decision-making and force options.

### 6.1 Policies

Based on the Collaborative Reform Recommendations explained in the ASU Report, PPD developed its policy on use of force (Operations Order 1.5, Rev. 6/06) that covers physical force, non-deadly force and deadly force. The General Policy (3) states: "It is the policy of the Department to use a reasonable amount of force to conduct lawful public safety activities." The policy conforms with the suggestions reported in the ASU Report and covers definitions, requirements, elements of force, force options including de-escalation, requirements to report and the responsibility to provide medical treatment to anyone against whom force was used. An important element of the new policy is that, "All sworn officers will intervene, if a reasonable opportunity exists, when they know or should know another employee is using unreasonable force" (3.D). The policy provides important and appropriate guidance to officers who may use force against members of the public. The section on deadly force (4.H, Rev. 04/17) has followed the guidance of the ASU Report and explains the definition of deadly force and circumstances under which deadly force can be used. The policy has a section on the use of firearms which details when deadly force is justified and requires annual training and reporting requirements. Specifically, the policy states "Deadly force is utilized as a last resort when other measures are not practical under the existing circumstances."

### 6.2 Training

Use of force policies set the conditions and circumstances when force can be used. These policies set critical strategies for officers but are mere words without meaning and context which is provided by training. As noted above, PPD revised its training curricula based on the ASU Report and has incorporated the latest knowledge and concepts into the academy. One innovation was to include both online and live instruction. The use of force training is set up to require

[92] See https://ric-zai-inc.com/Publications/cops-p287-pub.pdf

online instruction as a prerequisite for the classroom and scenario training. This is intended to make efficient use of time and resources.

In terms of the content, Decision-Making Drills is a course that reviews laws that justify the use of deadly force and techniques used to reduce reaction time when faced with encounters that could lead to the use of deadly force. Realistic scenarios are used to provide officers with experiences that require them to make critical decisions. Advanced Tactical Patrol Strategies trains decision-making through the use of realistic scenarios, "designed to test an individual's ability to think under high stress." Officers who go through the scenarios are debriefed and their actions and non-actions are critiqued and explained. Tactical Negotiations is a class taught online that reviews common mistakes police officers make when communicating with people in crisis and strengthens officer's skills in communication and negotiation. Tactics and Force Options is a course in which officers learn about the various force options, decision-making and communication with people in crisis.

The themes of the PPD training is knowledge, communication, and decision-making under stress. This training was developed in response to the ASU Report and includes classroom and scenario training. The training beyond the online courses is interactive and officers are debriefed on each scenario to learn the strengths and weaknesses of his or her response.

## 6.3 Observations of Training and Interviews with Staff

The NPF research team observed the day-long, in-service training on use of force options. First, we attended a training regarding hands-on tactics and how to subdue uncooperative suspects. This hands-on training was to refresh officers on how to use the appropriate tactics with uncooperative subjects. Although trainers were knowledgeable and helpful, we noted some slippage of accountability in terms of proactive attention to individual trainee performance and some possible disengagement of trainees, which trainers acknowledged. After the hands-on tactical aspect of the training concluded, the teams were split into groups. They went to the TAC village for live reality-based scenario exercises and to the virtual reality simulator, VirTra. We followed the groups to the TAC village and then to the simulator training.

Both team and partner-based training scenarios, with live actors playing the suspect, were used. Each scenario was executed and followed by a debrief. In the debrief, instructors discussed what happened, timing, decision-making and what the officers could have done differently, and why. The training had the structure to be manipulated by the live actors, and required team work, and effective strategy. The actors were officers with lengthy service and experience who understood the issues that younger or less-experienced officers would face. We were told that the scenarios were based on cases that had involved PPD officers in the past and that the training was real and the discussions at debrief were based, in part, on the incidents. The debriefs were quite brief and in at least one case was not well received by trainees who may not be accustomed to this type of feedback.

We noted some areas where supervisor-officer communication could be improved, which trainers recognized and noted. In addition to addressing these trainee participation performance issues, we also noted the struggles of providing training to officers while meeting minimum staffing requirements and the significant challenges associated with training a 3,000 member agency in constantly evolving techniques.

After our observation, we sat down with a member of the training academy to discuss the reorganization of the in-service training, its structure and quality. We learned that for years, training had been limited because of budgetary issues, which also stalled hiring recruits. One of the most significant changes made by the academy was a move to a squad-based training format. In prior years, officers would complete their annual re-certification training when their schedules allowed. This created a situation where officers from all parts of the city were completing training together. The problem with this format is that it did not allow squad members (officers that work on the same shift and patrol area) to train together. Moving to a squad-based format involves all squad members training together. The hope is that this format will improve team work and decision-making as a unit. In bringing back the in-service training, they wanted to stress repetition, and decision-making when it comes to use of force options. Before the active training module, officers were required to complete three online trainings. Although these trainings were required, there was no way to

ensure that they were completed prior to the in-service. It is important to note that this is partly because the courses were just recently developed, and tracking has not been implemented. The training outline indicated different measures that should have been displayed in the active training scenarios based on the online learning modules. However, we did not see much implementation or discussion of the various techniques that were described as being part of the training evaluation and outcomes. This could just have been a case of working things out on the first day, but these tactics needs more emphasis – which could be solved through longer debriefs.

Additionally, a new commander had recently been assigned to the academy to make sure the training was high quality and was managed properly. Developing the in-service use of force training required repetition and decision-making. As noted, prior to the active training module, officers are required to complete three online training courses. The training outline depends on issues that are covered in the online courses and it is important to know that officers entering the training have completed their prerequisites. Further, the training must emphasize the skills covered in the online courses and how they relate to the live training.

We also observed and participated in VirTra, the virtual reality scenario simulator. Officers are not allowed to observe others go through the training as it would allow a discussion among them as to the training scenarios, requirements and responses. The training software allows the trainer to change or modify what is happening on the 300-degree screens. There are a number of prompts they can choose, either escalating or de-escalating the behavior of the subject based on what the officer says and does. Virtual reality training simulators of this type are advantageous because they allow officers to practice both tactical and communication skills individually or with colleagues. As we found in our focus group interviews, PPD officers are particularly receptive to reality-based training, especially with tools like VirTra. Leveraging such assets will continue to help develop well-trained PPD officers who are prepared for a variety of situations. The challenge for PPD, and a concern for agencies around the country, is getting repeat and multiple scenario training on a simulator. In a large agency like PPD, getting all officers through their required recertification training is difficult. VirTra and other scenario-based training options are effective but also require time. Many agencies falsely believe that because they had 2,000 or 3,000 of their officers complete training that their officers receive "sufficient" training. However, it is important to note that in many situations this simply means that all officers complete one round of simulation training. We know from a host of educational research that repetition is key to training uptake and behavioral change. Moving forward, PPD's challenge will be to devise strategies to get their officers through training that is both effective and repetitious.

## 6.4 Summary

The PPD has learned from the Collaborative Reform Recommendations through the ASU Report and has responded well to the recommendations. The department has developed good, sound policies and training based on those policies. While our assessments are limited to process, it would be important for PPD to evaluate the effectiveness of the training once it has been established. Here are some of the basic takeaways from our observations.

- PPD has made tremendous strides in improving its training, having moved towards bringing in entire squads rather than piecemealing officers and supervisors are available, and by providing structure to the training.
- Debriefings need improvement in length and quality.
- Items that are discussed as important on the syllabus (empathy, different de-escalation tactics, etc.) should be incorporated into the training and discussed in the debrief.
- Consider implementing a way to track whether officers are completing the prerequisites prior to attending the scenario-based trainings.
- Seek ways of addressing factors that may inhibit learning such as pride and/or defensiveness.

Our review, being limited in scope and timing, did not include a formal analysis of OIS investigative procedures. After learning of the community's views regarding a perceived lack of accountability in how PPD has responded to OIS events, the issue of investigative policy and procedures became more relevant to the scope, but timing did not allow such an examination despite its value.

## 7. Key Findings and Recommendations

The City of Phoenix contracted with the NPF to conduct an analysis of the use of deadly force for the purpose of attempting to identify factors that may be related to the extraordinary increase in PPD OIS events in 2018. The approved research plan involved a multi-method review of agency data on OIS to identify differences between OIS events in 2018 and prior years, and analysis of data that captures factors in the operating environment and organizational factors trending with this OIS increase. This method was chosen based on the data available, and because it offers a "position neutral" approach, allowing the data to tell us what factors should be explored through identified differences. Consistent with that approach, we did not look into the backgrounds of the officers or subjects involved in these incidents at the individual level but examined the data across incidents in order to be more comprehensive. In conclusion, while 2018 appears to be a statistical yet tragic anomaly that has occurred in Phoenix and other agencies alike, there are several factors identified that are noteworthy and warrant further exploration:

- Through our careful evaluation of available data conducted in a compressed, six-month period, we identified an increase in subjects armed with firearms or simulated firearms involved in OIS encounters, and a significant increase in reported assaults on officers, specifically assaults on officers involving firearms. The increases noted here began in 2017 based on the data we were provided, with the exception of firearm assaults on officers where there these events doubled specific to 2018. This is not to suggest that the increase in OIS events in 2018 is directly attributable to the increases noted above, as OIS events are complex and typically involve many factors. To that point, there are many assaults on officers and armed subject encounters each year that do not become OIS events.
- The 2018 increase in OIS events was not limited to the City of Phoenix and has impacted communities throughout the Valley and possibly even other parts of Arizona and the southwestern United States.
- The examination of PPD's OIS event data suggests that 2018 is not the first or only year in which Phoenix has experienced a "spike" in OIS events. Trend data suggests that 2013 and 2016 also exceeded the 10-year mean in OIS events in Phoenix.
- We found no evidence in our review that policy or training is flawed or misguided and in fact found that PPD executive staff have taken many reasonable steps to strengthen both policy and training.
- Our discussions with the community and review of PPD actions revealed a lack of transparency on the part of PPD and a lack of trust between PPD and the community that may be inhibiting transparency.

**Recommendation #1: Document when officers point their guns at subjects.**

Agencies that require officers to document when they point their guns at subjects (but do not shoot at them) have significantly lower rates of fatal OIS.[93] Further, knowing the "universe" of incidents in which officers point their guns is necessary in order to make sense of observed racial disparities in OIS.[94] [95] [96] Several other large agencies currently require their officers to document when they point their guns at subjects, including the Dallas, Baltimore, Cleveland, New Orleans, and Chicago Police Departments. PPD should look to their policies for guidance as they craft their own (see, for example, Dallas Police Department's General Order 906.02.E). It should also be noted that technology exists to document both drawn weapons as well as "gripping," and to simultaneously notify agencies and supervisors of a drawn weapon, which could serve as both a valuable officer safety feature, as well as a supervision tool.

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[93] "Preventing the use of deadly force: The relationship between police agency policies and rates of officer-involved gun deaths," by J.T. Jennings, and M.E. Rubado, 2017, Public Administration Review, 77(2), 217-226.

[94] "Disparity does not mean bias: Making sense of observed racial disparities in fatal officer-involved shootings with multiple benchmarks," by B. Tregle, J. Nix, and G.P. Alpert, 2019, *Journal of Crime and Justice*, 42(1), 18-31.

[95] "What factors influence an officer's decision to shoot? The promise and limitations of using public data," by A.P. Wheeler, S.W. Phillips, J.L. Worrall, S.A. Bishopp, 2017, *Justice Research and Policy*, 18(1), 48-76.

[96] "Exploring bias in police shooting decisions with real shoot/don't shoot cases," by J.L. Worrall, S.A. Bishop, S.C. Zinser, A.P. Wheeler, and S.W. Phillips, 2018, Crime & Delinquency, 64(9), 1171-1192.

**Recommendation #2: Improve consistency in data collected for periodic analysis of officer-involved shootings.**

The prior analysis of OIS events from 2009 to 2014 conducted by the PPD BPS and ASU Center for Violence Prevention and Community Safety resulted in the creation of the "OIS Matrix," which represents a database on OIS events that is maintained by different units within the department. The Matrix was the critical source of data for this NPF Study. Since its original creation, new variables have been added to the database and the format design has changed several times. While these changes have offered the opportunity for improvement in the systematic review of OIS events, it has also created some data inconstancies. For example, the most recent version of the database does not contain data going back more than one year. The analysis for the current Study cobbled together this most recent version with the older versions. In addition, some variables were not consistently entered into the database. The most notable was the recording of toxicology reports on subjects, which were entered into the database starting in 2015 but became inconsistent in 2017. Overall, the OIS database is a valuable source for conducting assessments of OIS events over time and was the most important component for the present Study. A few efforts to improve the consistency of the data and validation will enhance the capacity of the department to conduct systematic reviews such as the present study. This will help improve transparency and analytic capabilities.

**Recommendation #3: Continue to improve training.**

PPD has made significant changes to its in-service training program and implemented a new version of its Use of Force Options in-service course. Not only have they instituted squad-based training, they have incorporated online prerequisites, and a detailed and structured syllabus to facilitate the training. We would also like to note that we observed one in-service training, on the first day it was being implemented. Some of our observations may not be wholly reflective of the new training series as a whole. As with any program, there is room for improvement, and we offer the following recommendations regarding training.

***Recommendation 3.1:*** Consider developing and implementing the ability to track completion of online learning prior to active sessions.

***Recommendation 3.2:*** Consider developing and implementing a formal evaluation of the new PPD training.

***Recommendation 3.3*:** Increase the repetition of social interaction and force-based training opportunities. The department recently introduced a new version of training using in-person scenario exercises and the VirTra training simulator. These training tools are critical for allowing officers to practice interactions and potential force-based encounters and receive instant feedback on their performance. One limitation to the training is that officers may only have the opportunity for scenario or simulator training once a year or once every other year, depending on the training cycle. Such a low frequency is inconsistent with the research on deliberate practice through repetitive training to improve performance.[97] [98] However, offering a greater number of such training opportunities in a department the size of PPD has notable logistical challenges resulting from the large number of officers, minimum staffing demands for normal operations, and limited facilities and equipment for scenario and simulator training. A recent project funded by the U.S. Department of Justice examined the Tact, Tactic and Trust (T3) social interaction and force training program by Polis Solutions that utilized video-based decision exercises to create more repetition in decision-making related to social interactions with potential force events. The program allowed for training to be conducted at the various patrol divisions as opposed to an academy or other centralized location. However, the interactive video training was still delivered in-person with instructors, which itself contained logistical challenges in coordinating training times with officer schedules. The Bureau of Justice Assistance has more recently funded the transition of Polis Solutions' interactive training videos to a self-contained web-based format,[99] which allows for training

[97] "The role of deliberate practice in the acquisition of expert performance," by K.A. Ericsson, R.T. Krampe, C. Tesch-Romer, 1993, Psychological Review, 100: 363-406.

[98] "Deliberate practice and the acquisition and maintenance of expert performance in medicine and related domains," by K.A. Ericsson, 2004, Academic Medicine, 10: S1-S12.

[99] See https://bjatta.bja.ojp.gov/ocp/polis-solutions-llc

delivery with the flexibility of not having to coordinate the schedules of officers and trainers. In order to improve the repetition of force-based decision-making to include potential shooting scenarios, in light of resource and operational constraints, PPD should consider potential approaches that combine the current in-person scenario and simulator training delivery with web-based or distributed virtual reality training approaches.

***Recommendation 3.4:*** Further leverage more robust debriefings as the key to attaining learning objectives from each of the scenarios used in training.

***Recommendation 3.5:*** Consider better aligning or balancing scenario selection and training format with the more common scenarios observed in PPD's OIS data, such as single officer incidents versus squad or group incidents.

**Recommendation #4: Increase transparency through the sharing of data and information with the community.** The community's perspective is important to understanding the dynamic between the police and the community it serves. One of the most obvious and significant findings that immediately became apparent is PPD's transparency is significantly lacking. While we commend PPD for providing three open data sets via the City's open data portal, the data are limited in detail and years available. In addition, while PPD's policies can be found on the PPD website, more could be done to improve transparency around policies, policy development, adherence and changes by cultivating input into new policies, policy changes, and assessments of policy compliance (e.g., accreditation processes/findings). To implement the below recommendations, the City of Phoenix may need to assess how these recommended actions may be impacted by Arizona law and to invest resources to increase its crime analysis capacity (staffing) and to support the procurement of new systems, including a National Incident-Based Reporting System (NIBRS)-compliant RMS.

***Recommendation 4.1:*** PPD should make available a full 10 years of use of force data (not limited to OIS events) in an open data format, providing many of the same variables used in our Study. Data should be updated quarterly on an ongoing basis, if not monthly. The Los Angeles County Sheriff's Office provides 21 variables in an open data format for OIS incidents from 2010 to Present; the Seattle Police Department provides 28 variables for OIS incidents from 2005 to Present; and the Portland Police Department offers 10-years of OIS incident data in an open format as well as an interactive visualization in a dashboard format. More than thirty law enforcement agencies have released or pledged to release OIS data through the national Police Data Initiative (PDI).

***Recommendation 4.2:*** In addition to use of force, calls for service, and crime data, PPD should provide multiple years of open data sets including assaults on officers (to include an indication of injury or non-injury), officer training requirements and activities, complaints, professional standards bureau case processing data and other datasets that allow the community to view these issues through official data that is regularly updated. The PDI provides a listing of open datasets released and regularly updated by over 100 large and small law enforcement agencies nationally.[100]

***Recommendation 4.3:*** PPD should not only release such data but should announce its availability to the community and participate in joint events with the community to review, analyze and improve datasets (such as providing geolocation properties or producing visualizations jointly) similar to what Tucson and Louisville Police Departments and other agencies nationally have participated in with their communities.

***Recommendation 4.4:*** PPD should consider following the example of Newark (New Jersey) Police and other major city police agencies such as Denver and San Francisco and release certain draft policies and policy updates for review and comment by the community before enacting new policies or changes. Alternatively, PPD should request input on key issues within policies. While some issues are not subject to input and are

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[100] See https://www.policedatainitiative.org/datasets/

determined only by law or are otherwise necessary for officer safety, etc., other issues may be more discretionary and open for input.

***Recommendation 4.5:*** PPD should provide a clear explanation of its internal accountability mechanisms (such as the Professional Standards Bureau) and how the PSB operates. PPD should also aggregate data on PSB cases initiated independently versus referred or initiated via complaint and provide data on the outcomes of these reviews. The criteria for initiating a PSB review should be provided.

**Recommendation #5: As transparency and accountability are increased, meaningful community engagement must be undertaken beyond PPD-selected advisory groups and participation.**

Working jointly with the community prior to, during, and after an OIS incident is a critically important activity. In our review, we found instances where officers and the community were generally in agreement and together could improve outcomes and understanding.

***Recommendation 5.1:*** PPD should take advantage of a no-cost community survey available through the National Law Enforcement Applied Research and Data Platform (the Platform) that will allow PPD to see and understand community sentiment across Phoenix neighborhoods and to benchmark Phoenix community sentiment to that of other communities across the nation.

***Recommendation 5.2:*** PPD should additionally consider the community contact survey also available through the Platform that will allow PPD to collect data on police-community interactions and, therefore, measure how community members perceive their interactions with officers and to benchmark Phoenix community sentiment to that of other communities across the nation.

***Recommendation 5.3:*** PPD should implement the officer survey available through the Platform that will allow PPD to collect data on rank and file officer views of the community's receptivity towards officers, feelings of officer safety and risk, officer views of internal support and accountability. The survey will also allow the department to benchmark PPD officers' views to that of other officers across the nation.

***Recommendation 5.4:*** PPD should seek opportunities for community engagement through various national programs such as the National Network for Safe Communities or the OneCOP initiative that facilitates the process of bringing the communities and the department together to solve key issues and improve trust.

**Recommendation #6: Increase the presence of proactive policing units.**

Research clearly reveals that certain evidenced based proactive policing strategies have the ability to reduce crime rates.[101] [102] Several officers we interviewed noted that recent reductions in proactive policing units in PPD may have helped contribute to an increase in OIS. Increasing the presence of units with proactive policing capabilities may allow PPD to focus more time on prolific offenders and hot spots[103] and, thereby, increase the chances of apprehending offenders before they become involved in an OIS. Consistent with research on "what works," such proactive policing strategies must be specific and targeted. Proactive strategies that focus on specific people/groups, crime types, and specific street segments stand the best chance of success.[104] [105]

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[101] "Reducing firearms violence through directed police patrol," by E.F. McGarrell, S. Chermak, A. Weiss, and J. Wilson, 2001, Criminology & Public Policy, 1(1), 119-148.

[102] "Reducing Crime: A Companion for Police Leaders," by J. Ratcliffe, 2018, Routledge.

[103] "The effects of hot spots policing on crime: An updated systematic review and meta-analysis," by A.A. Braga, A.V. Papachristos, D.M. Hureau, 2014, Justice Quarterly, 31(4), 633-663.

[104] "Proactive policing: Effects on crime and communities," by National Academies of Sciences, Engineering, and Medicine, 2018, Washington, DC: National Academies Press.

[105] "Reducing crime: A companion for police leaders," by J. Ratcliffe, 2018, Routledge.

**Recommendation #7: Conduct a staffing study to determine if PPD has sufficient officers to respond to calls for service demands and provide adequate back-up for responding officers.**

In the interviews, many of the officers argued that they have a tremendous issue with recruitment and retention. While we did not assess staffing at PPD, it is clear that bringing on more, qualified officers without reducing standards for recruitment should be a top priority for the city.

**Recommendation #8**: **Consider the sufficiency of PPD's current RMS and other key systems and technological tools to support the type of data collection, analysis, and reporting needed.**

PPD's data systems, including its RMS, will make ongoing and future analysis, as well as the production of data, challenging. As PPD considers compliance with the NIBRS, it should consider whether a new RMS could enable improved data collection, data management, analysis and release of data for reporting and transparency purposes.

**Recommendation #9: Consider alternatives and the enhancement of responses to the mentally ill – a shared law enforcement and community concern.**

A striking area of agreement between community representatives we spoke with and officers we spoke with is the prevalence of mental health issues, as well as mental health crisis response, diversion/deflection, and treatment needs in the community. There was strong agreement that the police are not the best equipped to respond to mental health crisis but alternatives to police response are lacking in the City. While PPD has made strides in crisis intervention team training and implementation, the City and the police department should consider additional triage response models, alternatives to police response, and treatment resources. We urge the City to engage in a leadership role around this critical issue, bringing the community, the justice system and public health communities together to identify best practices and improved service options.

## 8. Conclusion

The PPD has been proactive in the face of a precipitous increase in OIS incidents in 2018 and engaged the NPF to look for possible causes, and to make recommendations on areas in which the department could improve. Through examination of the data, interviews with PPD officers, supervisors, PSB investigators and community members, we were able to create a broad picture of the ongoing issues in Phoenix, hone in on some significant trends in 2018 OIS, and learn more about the relationship between PPD and the community it serves. Despite our efforts, there is no one issue that we can point to and definitively identify as the cause for the 2018 spike in OIS. However, the data shows some trends, and more work needed to address underlying strains between the community and department.

Many community members were concerned after the Chief of Police presented information that a higher number of officers were assaulted. The data supports this – it is apparent that assaults on officers were higher than past years, and more OIS subjects were armed with weapons, and guns (or simulated guns) in 2018. We strongly caution against pointing to this as the sole reason for the 2018 rise in OIS. There are areas where PPD can do better, as discussed in the findings and recommendations section above.

In our interviews with PPD officers, supervisors, investigators, and the community, we recognized another interesting trend. Both sides agreed on many topics – they simply see them from differing perspectives. There are a few key examples of this. First, both community members and police say there is more distrust. The community argued that lack of accountability, transparency, and actions by both PPD and agencies across the country have led to a greater distrust of PPD and law enforcement in general. The police say there is more distrust of the community due to the "Ferguson Effect," and their encounters with individuals who are openly defiant, or resist law enforcement. Second, interviewees from both groups stated that community members are more willing to go "toe to toe" with officers. From the community perspective, it is because of frustration, or a feeling that they need to "fight for their lives," and from the officers, they feel that it is due to the lack of respect and wanting to "fight to fight".

We acknowledge that we were not able to speak to enough community members to call these sentiments representative of the larger community. However, the divide is clear – not necessarily in what the issues are, but in the perspectives for those issues. Recommendations for bridging this gap are included in the findings and recommendations section above. We were also somewhat limited in our data collection efforts, partly because of time constraints, lack of nationwide OIS information (with the exception of the *Washington Post* fatality data) and an RMS change in 2015.

In closing, we hope that PPD will take our recommendations and work to improve on areas of training, transparency, accountability, and building a stronger relationship with their entire community. We thank the community members, officers, supervisors, PSB investigators, Training Bureau, Phoenix Law Enforcement Association, and Phoenix Police Sergeants and Lieutenants Association, who contributed their input to this report. We would also like to thank the Crime Analysis unit for their assistance in data gathering. Finally, thank you to Chief Williams and Executive Assistant Chief Kurtenbach for all of your efforts to provide us access to requested information in a timely manner and to ensuring the success of this Study.

## About the National Police Foundation

The National Police Foundation is America's oldest non-membership, non-partisan police research organization. We were founded in 1970 by the Ford Foundation to advance policing through innovation and science. We integrate the work of practitioners and social scientists to facilitate effective crime control and the progress of democratic policing strategies. We have a wide breadth of projects throughout the U.S. and Mexico. Among other efforts, we conduct scientific evaluations of policing strategies, organizational assessments, critical incident reviews, police data projects and issue timely publications critical to practitioners and policymakers. We also have a strong interest in office safety and wellness, preventable error in policing and helping policing enhance community trust and confidence in the area of police use of force.




**National Police Foundation**

1201 Connecticut Avenue N.W., Suite 200
Washington, DC 20036

(202) 833-1460

www.policefoundation.org